Thirty years of psychical research : being a treatise on metapsychics / by Charles Richet, PH.D., translated from the French by Stanley De Brath.

Contributors

Richet, Charles, 1850-1935.

Publication/Creation

New York : The Macmillan company, 1923.

Persistent URL

https://wellcomecollection.org/works/bmz3d74p

License and attribution

Conditions of use: it is possible this item is protected by copyright and/or related rights. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s).

wellcome collection

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

M.S.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b30010135

THIRTY YEARS OF PSYCHICAL RESEARCH



THE MACMILLAN COMPANY
NEW YORK · BOSTON · CHICAGO · DALLAS
ATLANTA · SAN FRANCISCO

MACMILLAN & CO., LIMITED
LONDON · BOMBAY · CALCUTTA
MELBOURNE

THE MACMILLAN CO. OF CANADA, LTD.
TORONTO

Thirty Years of Psychical Research

BEING

A Treatise on Metapsychics

BY

CHARLES RICHET, PH.D.

Translated from the French

by

STANLEY DE BRATH, M. INST. C. E.
Formerly Assistant Secretary to the Government of India, Public Works Department

New York
THE MACMILLAN COMPANY
1923

All rights reserved

PRINTED IN THE UNITED STATES OF AMERICA

SHEPHERD COLLECTION

COPYRIGHT, 1923,

BY THE MACMILLAN COMPANY.

Set up and printed. Published March, 1923.



/RIC

FERRIS PRINTING COMPANY
NEW YORK CITY

Omnia jam fient fieri quæ posse negabam

This book is dedicated to the memory of my illustrious friends and masters

Sir WILLIAM CROOKES

and

FREDERIC MYERS

who, equally distinguished by their courage and by their insight, were the first to trace the outlines of this science.

PREFACE

Those who may expect to find in this book nebulous discussions on human destiny, on magic, or on theosophy will be disappointed. I have endeavoured to write on science, not on dreams; and I have therefore confined myself to a statement of facts and discussion of their actuality, not only without advancing any theory, but scarcely mentioning theories, for all theories as yet proposed to account for metapsychic facts seem to me terribly frail.

It is possible or even probable that some day a tenable theory will be formulated, but the time is not yet, for the facts on which any theory could be erected are still in dispute. It is necessary, first, to establish the facts and to review them in detail and as a whole, in order to verify the conditions under which they occur. This is our primary duty, and our only duty.

The task is a hard one; the phenomena being unusual, scientists and the public have usually rejected them without examination.

Nevertheless the facts are facts; they are numerous, authentic, and startling. In the course of this work there will be given instances of these facts so numerous, so precise, and so evidential that I do not see how any unbiassed man of science can cast doubt upon all of them if he consents to look into them.

The three fundamental phenomena of this new science can be summed up in three sentences.

1. Cryptesthesia (the *lucidity* of former writers) is a faculty of cognition that differs from the normal sensorial faculties.

2. Telekinesis is a mechanical action that differs from all known mechanical action, being exerted at a distance and without contact on persons or objects, under certain determinate conditions.

3. Ectoplasm (the *materialization* of former writers) is the formation of divers objects, which in most cases seem to emerge from a human body and take on the semblance of material realities—clothing, veils, and living bodies.

These make up the whole of metapsychics. It seems to me that to admit this much is to admit a great deal. To go further is to go beyond the present limits of science.

I do, however, claim that science, strict and inflexible science, ought to admit these three strange phenomena that it has up to the present refused to recognize.

In giving to this book the usual form of treatises on physics, botany, pathology, and other sciences, it has been my intention to remove from facts called "occult," many of which are indisputably true, the supernatural and mystical implications ascribed to them by those who do not deny their actuality.

ABSTRACT OF PREFACE TO SECOND FRENCH EDITION

Professor Richet notes that since the rapid exhaustion of the first edition many fresh experiments have been made by him and by others, notably those with M. Stepan Ossovietzki, which are so decisive as to admit of no uncertainty whatever.

Referring to criticisms on the first edition, he remarks:

"Complaint has been made, and I admit its force, that the numerous experiments and observations recorded have been abbreviated and condensed so that accounts that are very convincing when given in full detail lose much of their force by being abridged.

"This unquestionably is the case. I had to choose between presenting a few selected facts in full detail, on the one hand; or, on the other, giving summaries of a great number, interesting alike by their variety and their multiplicity. I followed the latter plan because those who desire fuller particulars can always refer to the original sources, which I have been careful to cite.

"Another criticism (which I take as laudatory) is that by giving the facts without committing myself to any theory or inferences, I have been led into strong contradictions. Such contradictions could easily have been avoided if I had framed a complete theory by bludgeoning every inconvenient fact, magnifying every favourable one, glossing over awkward arguments, and making full proofs out of half-proofs. This criticism has moved me the less that I had already made it on myself, perhaps more severely than

NOTE.—For the bibliography, which has no pretensions to be complete, the following abbreviations have been adopted: *A. S. P.* for the *Annales des Sciences Psychiques; P. S. P. R.* for the *Proceedings of the Society for Psychical Research; J. S. P. R.* for the *Journal of the Society for Psychical Research;* and *Am. S. P. R.* for the *Proceedings of the American Society of the same name.*

my critics could. Metapsychic science is in its very earliest stages, and any theory claiming to be complete, methodical, and unshakable is foredoomed to error.

"I pay no heed to such criticisms as that in the *Mercure de France*. The anonymous critic finds the F. N. T. B. T. experiment given on p. 170 very bad; but he suppresses altogether the words immediately following it. 'I mention this experiment, which, in comparison with the good ones described above, *is terribly poor,* not to draw any inference from it, but only to show that when the method of experiments is faultless, the calculus of probabilities is very useful.'

"T. Bozzano objects strongly to the separation between subjective and objective metapsychics, which, according to him, are combined in actual fact. I have much respect for Professor Bozzano's opinion, but I cannot share it in this case. It seems to me, on the contrary, that this separation is a real advance, especially from the didactic point of view. Also, the separation is marked with different mediums; Eusapia and Marthe present exclusively physical phenomena. I have not heard that Mrs. Piper has ever given any but subjective ones. Some mediums, such as Home, Kluski, Stainton Moses, and Mme. d'Espérance, have shown both kinds of phenomena, but it would be a mistake to consider them as necessarily linked. Many hypnotizable subjects have flashes of lucidity (this is quite commonly met with), while the production of lights and ectoplasms is quite rare. Further, the methods of investigation are quite different for the two kinds, and this alone justifies the classification. I am even inclined to think this necessary distinction a leading point in my book.

"I very willingly concede to Professor Bozzano that as metapsychic science advances, some relations will perhaps be discovered between these two functions that now seem very sharply marked off from each other. Nothing is less intellectual in itself than an ectoplasmic phenomenon."

TRANSLATOR'S NOTE

In rendering this admirable Treatise into English, it has been my aim to make it available both to students and to average readers. I have therefore retained the French references in the foot-notes, as any student who might wish to look up these references must obviously ask for them under their French titles. The average reader will probably be content to see that Professor Richet has given authorities for all statements that he quotes, and that he has winnowed out all statements that he thinks doubtful.

It is not always possible to render in English the delicate shades of meaning conveyed by some French expressions; I have, however, endeavoured to give the exact sense of the original by free translation; and knowing that Professor Richet emphatically desires to keep clear of spiritualist or any other theories, I have been particularly careful, when a choice was open, not to employ any terms that could possibly imply a leaning to any theory soever. I have, however, in my translation used the term "spiritualist" where a religious implication seems intended, and "spiritist" where no such implication exists.

The author having communicated the typescript of additions to be made to the second French edition, most of these have been abstracted and added as foot-notes, so that the first English edition may be taken as parallel with the second French edition.

It has not been possible in all cases to refer to originals for the quotations from English writers, and in such cases they have been retranslated from the French, without, I trust, deviation from essential meaning. I hope thus to have discharged the honour of having been entrusted by the author with the translation of a book that must surely have a powerful and far-reaching influence.

STANLEY DE BRATH.

Weybridge, July, 1922.

CONTENTS

PAGE

Preface vii

BOOK I

CONCERNING METAPSYCHICS IN GENERAL

1. Definition and Classification 3
2. Is There a Science of Metapsychics? 6
3. Historical Summary 15
   1. The Mythical Stage 15
   2. The "Magnetic" Stage 21
   3. The Spiritist Stage 25
   4. The Scientific Stage 30
4. Mediums 38

BOOK II

SUBJECTIVE METAPSYCHICS

CHAPTER I. ON SUBJECTIVE METAPSYCHICS IN GENERAL ... 49
   1. The Limits of Psychic and Metapsychic Science 49
   2. Chance and Mathematical Probability in Metapsychic Facts 55
   3. Concerning Errors of Observation 59

CHAPTER II. ON CRYPTESTHESIA (LUCIDITY) IN GENERAL .. 64
   1. Definition and Classification 64
   2. Connection of Cryptesthesia with Lucidity and Telepathy 65
   3. Phenomena of Normal Psychology Having Only the Semblance of Cryptesthesia 69
   4. Classification of the Modes of Cryptesthesia 82

CHAPTER III. EXPERIMENTAL CRYPTESTHESIA 85
   1. Cryptesthesia in Normal Individuals 85
   2. Cryptesthesia Under Hypnotism and Magnetic Treatment 99
      (a) Magnetic Emanations 100
      (b) The Development of Cryptesthesia by Hypnotism 107

PAGE

3. Cryptesthesia Under Hypnotism 114
(a) Experiments on Hypnotized Subjects 115
(b) Conclusions 134
4. Cryptesthesia Under Spiritist Conditions 136
(a) Summary of the Facts 136
(b) Investigation with a Hidden Alphabet 167
(c) Cross-Correspondences 173
5. Cryptesthesia Among Sensitives 176
(a) Psychometry, or Pragmatic Cryptesthesia 177
(b) Transfer of Sensibility 185
(c) Crystal Vision 200
6. Conclusions on Experimental Cryptesthesia 203
7. On the Identification of Spiritist Personalities 208
8. Xenoglossis 220

CHAPTER IV. THE DIVINING-ROD 228
1. Historical 228
2. Summary of the Facts 230
3. Concerning Rhabdic Force 235
4. Deductions from the Point of View of Cryptesthesia. 238

CHAPTER V. METAPSYCHISM IN ANIMALS 240

CHAPTER VI. SPORADIC CRYPTESTHESIA 245
A. Monitions 245
I. On Monitions in General 245
1. Classification and Definition 245
2. Conditions Necessary that Monitions Should Be Regarded as Such 248
(a) The Hypothesis of Chance Coincidence 252
3. Conditions Under Which Monitions Occur 256
4. The Symbolical Form Taken by Monitions 260
5. Monitions and the Telepathic Hypothesis 265
6. On the Frequency of Monitions 267
II. On Certain Monitions (Not Collective) Other Than Monitions of Death 270
III. Monitions of Death 282
Conclusions 325
IV. Collective Monitions 328
(a) Collective Monitions, Non-simultaneous and Non-identical 330
(b) Simultaneous and Collective Monitions 334
Conclusions 342

PAGE

CHAPTER VII. PREMONITIONS 344
1. On Premonitions in General 344
2. Auto-Premonitions 348
(a) Of Sickness 348
(b) Of Accidental Death 354
3. Premonitions, Properly So-called 356
(a) Under Hypnotism 356
(b) Spiritist Premonitions 361
(c) Accidental Premonitions 366
(a) Of Sickness and Death Due to Natural Causes 367
(b) Of Accidental Death 371
(c) Of Sundry Events 376
4. Conclusion 395

BOOK III

OBJECTIVE METAPSYCHICS

CHAPTER I. ON OBJECTIVE METAPSYCHICS IN GENERAL 399
CHAPTER II. MOVEMENTS OF OBJECTS—TELEKINESIS 401
(a) Table-Movements 401
(b) On Some Cases of Experimental Telekinesis 405
(c) Of Noises and Raps 443
(d) On Direct Writing 448
CHAPTER III. ECTOPLASMS (MATERIALIZATIONS) 454
(a) On Fraud in Ectoplasmic Experiments 454
(b) Leading Ectoplasmic Experiments 492
CHAPTER IV. LEVITATIONS 546
CHAPTER V. BILOCATIONS 552
(a) Objective Bilocations 552
(b) Monitions of Approach 559
CHAPTER VI. HAUNTINGS 563
1. On Hauntings in General 563
2. On the Hauntings of Houses (Subjective) 571
3. Telekinesis in Haunted Houses 578
4. Conclusions 591

BOOK IV

Conclusion 595
Index 629

THIRTY YEARS OF PSYCHICAL RESEARCH

THIRTY YEARS OF PSYCHICAL RESEARCH

BOOK I

Concerning Metapsychics in General

1. *Definition and Classification*

In all ages men have observed that sporadic, irregular, and unpredictable facts occasionally intermingle with the ordinary events of daily life. Unable to find rational explanations for these they have accounted for them by the intervention of supernatural powers—gods or demons.

With the growth of knowledge, faith in these divine or demoniacal interferences in our little human affairs has lost ground. In an aurora borealis, an eclipse, a comet, or a storm, we now see only a natural occurrence, some of whose laws we have been able to formulate. We no longer refer epilepsy and hysterical outbreaks to spirit possession or to Satan.[1]

Nevertheless, in spite of the great advances in physics, chemistry, and physiology, the laws of these sciences, as at present known, do not account for certain exceptional phenomena, and these phenomena being inexplicable by orthodox science, it has been found convenient to ignore them. But these strange occurrences, whether they be accepted or denied, still remain facts; their actuality is unaffected whether we find a place for them in recognized science or not.

It therefore seems desirable to present the mass of these phenomena methodically. However unusual in their occurrence they must, as facts, be subject to laws and therefore be accessible to study, i.e., to science. A science, or at any rate an orderly survey, of the supernatural and the occult is at least possible.

The terms "supernatural" and "supernormal" (the latter due to F. W. H. Myers) are, however, both inadmissible, for there can

[1]The bibliography of magical science is enormous. Those who desire to form even an incomplete idea of its extent may consult Graesse, *Biblica magica et pneumatica,* Leipzig, Engelmann, 1843, 175 pp.; and R. Yves-Plessis, *Essai d'une bibliographie française de la Sorcellerie,* Paris, Chacornac, 1900.

be nothing in the universe but the natural and the normal. From the moment that a fact exists it is necessarily both natural and normal. The terms "supernatural" and "supernormal" must therefore be rejected along with "the occult." This latter term is indeed somewhat naïve, for "the occult" simply means that which is involved in mystery and therefore inaccessible to us. In 1905, I proposed the term Metapsychic,[1] which has been unanimously accepted. It has on its side no less an authority than Aristotle. Aristotle, having discussed the physical forces, went on to write on those great laws of nature that transcend physics. He took the title Meta-physics (*μέτα τα φυσικα*).

This term must now be defined.

Metapsychic facts are marked off from the physical in that they seem due to an unknown intelligence, whether human or non-human. In nature we observe intelligence only among living beings; in man we perceive no sources of cognition otherwise than through the senses. We leave to normal psychology the study of human and animal intelligence. Metapsychic phenomena are quite different; they seem due to unknown but intelligent forces, including among these unknown intelligences the astonishing intellectual phenomena of our subconsciousness.

Leaving aside the sharply demarcated field of normal psychology, metapsychics is the only science that deals with intelligent forces. All other forces as yet studied by men of science, from the point of view of cause and effect, are blind forces devoid of self-consciousness and caprice—in other words, without personality or will. We cannot suspect the least intellectuality in the combination of chlorine and sodium. Mercury expands by heat without its being able to understand or modify its expansion. The sun projects calorific, electric, and luminous rays without will or choice—it has neither personality nor thought. But the forces that govern presentiments, telepathy, movements of objects without contact, apparitions, and certain mechanical and luminous phenomena do not seem to be blind and unconscious forces like those of chlorine, mercury, and the sun. They have none of the fatality that attaches to the mechanical and chemical reactions of

[1]When, in 1905, I presented this word in the course of my presidential address to the S. P. R., London, Mr. W. Lutoslawski pointed out to me that in a Polish publication (*Wyklady Jagiellonskie*, Cracow, 1902), he had already suggested this word; but this was for somewhat different reasons. E. Boirac has suggested the term Parapsychics, which has not found acceptance, while the term Metapsychics is now generally adopted.

matter. They appear to have intellectuality, will, and *intention,* which may not be human, but which resemble human will and intention. Intellectuality—the power of choice, intention, and decision conformably to a personal will—characterizes all metapsychic phenomena.

I shall divide our subject-matter into Objective and Subjective Metapsychics.

Objective metapsychics deals with certain mechanical, physical, or chemical effects perceptible to our senses, not proceeding from known forces, but seemingly directed by intelligence. It states, classifies, and analyzes these material phenomena.

Subjective metapsychics studies those phenomena that are purely intellectual. These are characterized by an indication of some realities that are not revealed by our senses. Everything takes place as if we had a mysterious faculty of cognition—*lucidity*—which the classical physiology of sensation cannot as yet explain. I propose to call this faculty Cryptesthesia, i.e., a sensibility whose nature escapes us.

Metapsychic science therefore treats of purely mental phenomena that can be admitted without reference to any known laws of living or inert matter, or any change in our concepts of the different physical energies—heat, light, electricity, gravitation, etc., which we are accustomed to measure and specify.

Objective metapsychics, on the contrary, deals with certain material phenomena inexplicable by ordinary mechanics—the movement of objects without contact, haunted houses, phantoms, materializations that can be photographed, sounds, and lights—all of them tangible realities affecting our senses.

In other words, subjective metapsychics is internal, psychic, and non-material: objective metapsychics is material and external.

The boundary between the two orders of phenomena is sometimes uncertain; often, however, it is sharply marked. For instance, the assassination of Queen Draga was announced in Paris on the 11th of June, 1904, at the very minute that it was committed in Belgrade, by a medium who could have had no normal means of cognizance of this crime. This is a fact of subjective metapsychics.

Eusapia Paladino placed her hands half a yard above a heavy table; her hands, her feet, her knees, her waist, her head, and her mouth were all held; the table rose off its four legs without contact. This is a fact of objective metapsychics.

Frequently the phenomena pertain to both kinds, and it is difficult or impossible to distinguish between them. A. sees the apparition of his dying father, B. If other persons present see nothing, the vision is obviously subjective; but if the image of B. is seen simultaneously by A., and by others, still more if the apparition has been photographed leaving its impression on the sensitive plate, this is not only a subjective but also an objective fact, there being a material accompaniment, and A.'s vision can no longer be considered merely subjective.

Subjective phenomena are much more frequent than the objective; mediums giving the latter are rare. Moreover when material phenomena are produced they are nearly always accompanied by noteworthy subjective facts.

Metapsychics can therefore be defined as—a science dealing with mechanical or psychological phenomena due to forces that seem to be intelligent, or to unknown powers latent in human intelligence. This science is therefore profoundly mysterious; indeed, its mysteries are such that extreme scientific caution is called for in dealing with them.

2. *Is There a Science of Metapsychics?*

This question must be put, for to many men of science none of the alleged facts in the domain of "magnetism" or spiritualism deserve serious consideration. They say, "A science cannot be constructed out of gossip; and the accounts you bring us are nothing more. The hallucinations with all their wealth of detail described by simple people are matter for the alienist, and the performances of mediums are vulgar frauds. Mediums who claim supernatural powers and allege that they are intermediaries between the dead and the living are either hallucinated or tricksters. As soon as precautions are taken against credulity and fraud the error or the imposture is always manifest. No undeniable fact of lucidity or movement of objects without contact has ever been established before a committee of enquiry composed of men of scientific standing. If chance, mal-observation, and trickery are eliminated, nothing remains of the so-called metapsychics but a vast illusion. The stricter the conditions, the slighter the phenomena become, till they vanish altogether. A science that claims to be experimental but relies on experiments that cannot be reproduced is no science at all. You affirm ex-

traordinary and unbelievable things that upset all that science has hitherto accepted as true, but you cannot prove them, for up to the present such proof has evaded all methodical research. It is not for us to prove that the facts you affirm are false; it is for you to prove that they are true.

"Further, even if we were to see these strange facts we should think ourselves tricked or hallucinated, for your work lies among impostors, and the things you affirm are too absurd to be true."

Such is the kind of language used by honourable men of science who deny the reality of all metapsychic phenomena. If they were right this book would be absolutely useless, even ridiculous; and might be entitled "A Treatise on an Error." But, as we shall endeavour abundantly to prove, these facts exist, and are called occult only because they are not understood.

We have read and re-read, studied and analyzed the works written on these subjects, and we declare it vastly improbable, and even impossible, that eminent and upright men such as Sir William Crookes, Sir Oliver Lodge, Reichenbach, A. Russel Wallace, Lombroso, William James, Schiaparelli, F. W. H. Myers, Zöllner, A. de Rochas, Ochorowicz, Morselli, Sir William Barrett, Ed. Gurney, C. Flammarion, and many others, in spite of their close attention and their scientific knowledge, should all have been duped over and over again a hundred times by tricksters or have been the victims of an astounding credulity. It is not possible that they should all and always have been so blind as not to perceive frauds necessarily gross; so incautious as to form conclusions where no conclusion was legitimately possible; and so unskilful as never to have made a single unexceptionable experiment. *A priori,* their experiments deserve careful consideration and not to be contemptuously rejected.[1]

The history of all sciences warns us that the simplest discoveries have been rejected *a priori,* as being incompatible with science. Medical anesthesia was denied by Majendie. The action of microbes was contested for twenty years by all the scientists of all the academies. Galileo was imprisoned for saying that the earth

[1]An eminent English scientist, Lord Kelvin, quoted by Myers (*A. S. P.,* 1904, xiv, 365), ventures to express himself as follows:

I hold myself bound to reject everything that tends to the acceptance of this wretched superstition of animal magnetism, turning tables, spiritualism, clairvoyance, and rappings. There is no mystical seventh sense. Clairvoyance and all the rest are but the results of mal-observation combined with intentional imposture practised on simple and credulous minds.

revolves. Bouillaud declared that the telephone was but ventriloquism. Lavoisier said that stones cannot fall from the sky, for there are no stones in the sky. The circulation of the blood was only admitted after forty years of sterile discussion. In a lecture in 1827 at the Academy of Sciences, my great-grandfather, P. S. Girard, considered it folly to suppose that water could be led to the upper floors of houses by pipes. In 1840, J. Müller declared that the speed of nerve-impulses could never be measured. In 1699, Papin constructed the first steamboat; a hundred years later Fulton rediscovered the possibility of steam navigation, but it was not applied till twenty years later. When in 1892, under the guidance of my distinguished master, Marey, I made my first attempt in aviation, I met with only incredulity, contempt, and sarcasm. A volume might be written on the absurd criticisms with which every great discovery has been received.

This is not a matter of the opinions of the crowd, which are of no importance; they are the opinions of scientists, who imagine that they have laid down boundaries that science cannot overpass. These boundaries soon become milestones on the road of progress, as Flammarion remarks. When such men declare that such and such a phenomenon is impossible, they make an unfortunate confusion between what is contradictory of known laws and what is new. This must be emphasized, for it is the cause of disastrous misunderstandings.

Heat expands bodies; and if any one tells us that mercury, copper, lead, or hydrogen under the usual conditions of experiment do not expand when heated I have the right to deny the statement, for it is in flagrant contradiction with observed facts frequently verified. But if a new metal is discovered and a physicist tells me that it contracts instead of expanding when heated I cannot deny this *a priori*. However improbable this anomaly in the laws of physics may be, I must, if not guilty of presumption, verify the exception, since it applies to a new substance that may be different from all others.

Every new truth necessarily appears highly improbable; such, however, are of frequent occurrence in the evolution of the sciences, and as soon as a discoverer enunciates one it excites opposition. Instead of testing, men deny it. Claude Bernard states that the animal body generates sugar, and forthwith objections are made. "To admit this is to upset scientific conclusions.

Sugar is a vegetable product, animals consume it. The sugar that has been found in animal organisms is sugar derived from food, or from changes in a dead body. In short, sugar cannot be generated by an animal organism." We know the fate of these statements.

Again, let us suppose magnetic attraction to be unknown, and the magnet a very rare object. A traveller who has seen a magnet but cannot find another, states that he has seen a body that attracts iron. His statement will provoke universal opposition and denial. Why should steel have a property not possessed by copper, lead, or any other known body? Nothing like it has ever been seen; if the thing were true it would have been known long since.[1]

Everything of which we are ignorant appears improbable, but the improbabilities of today are the elementary truths of tomorrow.

Among the discoveries which by reason of my advanced age I have seen developed under my own eyes, so to speak, I will take four which in 1875 would have seemed absurdly inadmissible:

1. The voice of an individual speaking in Paris can be heard in Rome. (Telephone.)
2. The germs of all diseases can be bottled and cultivated in a cupboard. (Bacteriology.)
3. The bones of a living person can be photographed. (X-rays.)
4. Five hundred guns can be taken through the air at a speed of 180 miles an hour. (Aëroplanes.)

Anyone who uttered such audacities in 1875 would have been thought a dangerous lunatic.

Our routine-keeping intelligence is such that it rejects anything to which it is unaccustomed, and from a careful study of the facts around us, we should be content to say, There are some that are usual and some that are unusual. We ought to say no more than this, and above all we should be careful not to make two classes—facts that are understood, and facts that are not understood. For in truth we really understand nothing, absolutely nothing, of the truths of science, whether great or small.

[1]When tuberculosis was stated to be contagious, a professor of the Faculty of Paris said, "If tubercles were contagious that would be known already," and in 1878 his words were almost unanimously approved by the Medical Faculty.

What is matter? Is it continuous or discontinuous? What is electricity? Is the hypothesis of the ether really understood by those who accept it? We see a stone fall back when thrown upwards; do we therefore understand gravitation? Two gases combine to form a new body in which the same atoms as in the gases are found; have we really understood what has taken place? Why should such and such an ovule fertilized by a certain zoosperm produce an oak-tree, a bear-cub, an elephant, or a Michelangelo, according to its kind? How does the spider make its web, or the swallows find their way across the seas? These marvels do not astonish us because we are used to them. But we ought to have the courage to admit that usual as they are, they are none the less mysteries.

The facts of metapsychics are neither more nor less mysterious than the phenomena of electricity, of fertilization, and of heat. They are not so usual; that is the whole difference. But it is absurd to decline to study them because they are unusual.[1]

We constantly find that the authors and observers who have busied themselves with metapsychics show a very regrettable tendency to consider only their own observations as exact, and to reject all others. Thus (with certain exceptions) those who have confined their studies exclusively to telepathy and the subjective side of metapsychics are prone to attach excessive importance to that aspect of the facts and to refuse credence to phenomena of telekinesis and ectoplasm, however well substantiated.

This is the case with several eminent members of the English S. P. R. They are easily satisfied in cases of mental transmission, even though that may be sometimes explicable by coincidence;

[1] I have been able to observe a curious instance of the folly with which this fear of the unaccustomed can afflict an honourable scientist. During the Exhibition of 1900 at Paris, I presented to the Psychological Congress a Spanish child, Pepito Arriola, aged three years and three months, who played amazingly on the piano. He composed military or funeral marches, waltzes, habaneras, minuets, and played some twenty difficult pieces from memory. A hundred members of the Congress heard and applauded him. This tiny marvel of precocity came to my house, and in my drawing-room, on my piano, twice during the day and in the evening before a number of persons, he played at a distance from his mother. Then, four years later, comes an American psychologist, Mr. Scripture, who announces that I was the victim of an illusion, and that the music had been played not by Pepito Arriola, who was too little to play, but by his mother!

Incredulity carried to such a point of aberration matches the credulity of the celebrated geometer Chasles, who showed with pride an autograph letter, in French, from Vercingetorix to Julius Cæsar. The scepticism of Mr. Scripture is of the same stamp as the credulity of Chasles.

but as soon as physical phenomena are in question they demand impossible proofs even when such proofs are useless to the demonstration.

Conversely, an experimenter who considers himself to have seen a materialization will take it as well authenticated, though his study may have been quite superficial; and will put forward exaggerated and ridiculously severe criticisms of transmission of thought or of materializations described by other observers perhaps quite as competent as himself.

When a phenomenon is unusual, even those who are open to new truths do not admit it without personal verification. It seems, however, that our criticism, severe as it may be (and should be), ought to be exercised as much, if not more, upon our own observations than on those of others. If I permit myself to criticize the mentality of scientists towards metapsychic matters, I do so because I have fallen into the same mistake myself. In working at this subject I did not follow the procedure usual in the study of other sciences. I made experiments before studying books; so that I started by acquiring personal convictions, which were not in the least bookish. Only subsequently did I read and meditate on the works of ancient and modern experimentalists who have devoted themselves to such researches. I was then astounded at the volume and the completeness of the proofs. My own experiments and those of others finally led me to a profound conviction that metapsychics is a real science to be treated like all other sciences—laboriously, methodically, and with respect.

These unusual phenomena are real: (1) There is a faculty of cognition other than our usual faculties; (2) there are movements of objects other than those to which we are accustomed. And it is irrational to refuse to study these unusual phenomena by the methods of observation and experiment that have answered so well in all other sciences. Claude Bernard has differentiated the sciences that rest on observation from those that rest on experiment. Metapsychics belongs to both classes. It is often experimental, like chemistry and physiology; but it is often akin to historical science and rests on human testimony.

Under its experimental aspect it should be treated as an experimental science, by technical methods of research, with scales, photography, by graphic methods—all the devices of exact measurement employed by physiologists. I perceive no essential difference between the proper experimental methods, except that the

chemist and the physiologist are dealing with easily procurable materials, whereas the student of metapsychics requires a *medium,* a human subject difficult to find, easily put off his balance, and highly capricious, who must at all times be handled very diplomatically. But once an experiment has begun it should be carried out as rigorously as one on arterial pressure or on the heat generated by burning acetylene.

In no kind of experiment are all the conditions absolutely within control. This axiom of scientific method applies more strongly in metapsychics than in any other science. Darkness may be necessary, or silence; or perhaps noise? Perhaps some ill-defined psychological conditions may be essential also? After all, this applies to all infant sciences; in their embryonic stage the conditions requisite to the development of the facts to be proved are not known. The experimenter falls into gross mistakes and the experiment fails just when he naïvely imagines that he has provided all the elements of success.

In so far as it is an observational and traditional science, metapsychics has abundant documentary evidence. This is profoundly unequal in value, and it is necessary to know how to choose the material and to separate the wheat from the tares by severe criticism. But to condemn all recorded observation would be irrational; all historical science is derived from such records. Has not medicine up to the time of Claude Bernard and Pasteur been a science of observation? Is it not largely so today? A great physiologist has said that a well-observed fact is as valid as a good experiment. This is perhaps going a little too far, for the certitude given by an observation is of inferior quality to that resulting from a good experiment. Nevertheless, the sciences that rest on observations are valid, and it is folly to wish to reject records.

But there is no need to set the one method in opposition to the other. When observation and experiment lead to the same results they mutually confirm each other. In this book, therefore, will be found two chapters on each variety of phenomena, one dealing with experiments and the other with observations, whether the matter in hand concerns lucidity (cryptesthesia), the movements of objects (telekinesis), or materializations (ectoplasmic forms).

Experimental method is relatively easy, whereas the method of observation is extremely difficult. The documentary evidence

is often doubtful. It is voluminous, far too voluminous; metapsychic science is hampered by imperfect experiments and malobservation. Those who have cultivated it, instead of handling it with scientific exactitude, have treated it as a religion for adepts—an error that has had disastrous results.

Spiritualists have intermingled religion and science to the great detriment of the latter.

Not that I would blame the efforts of spiritualists; that would be gross ingratitude. While official science, followed by the immense majority of the public, rejected disdainfully without examination, and often with obvious ill-will, the work of Crookes, A. R. Wallace, and Zöllner, the spiritualists took up the facts and set to work upon them. But instead of making them matters of science, they made them matters of religion. They carried on their séances in a mystical atmosphere, with prayers; speaking of moral regeneration; preoccupied with mysteries; convinced that they were conversing with the dead; and losing themselves in infantile discursiveness. They refused to see that metapsychic facts are of the present, not of the beyond, for perhaps there is no beyond. "The beyond" has been their ruin, and they have lost themselves in puerile theology and theosophy.

When a historian studies the *Capitularies* of Charlemagne, he is not thinking of the beyond; when a physiologist is measuring the muscular contractions of a frog he says nothing about ultraterrestrial spheres; when a chemist determines the amount of nitrogen in lecithin he says nothing about human survival. Metapsychics must be treated after the same manner, without dreams about ethereal worlds or psychic emanations; we must remain on the earth, take all theory soberly, and only consider humbly whether the phenomenon studied is true, without seeking to deduce the mysteries of past or future existences.

For instance, when we are studying cryptesthesia and seeking to discover whether a sensitive will give the name we are thinking of, without any indication on our part, our whole attention should be vigilantly concentrated on giving absolutely no sign whatever, and on comparing the letters given by the subject with those in the name thought of according to the mathematical probability of 1 : 25, since there are twenty-five letters in the alphabet.[1] If we are studying telekinesis, the limbs of the medium must be

[1]The French alphabet has twenty-five letters only.

held firmly enough to make sure that the table cannot be moved by her hands, her feet, or by any trick soever.

It does not interest me to go beyond this. I am keenly interested in these humble tasks which need no small courage to undertake, without connecting them with the immortality of the soul.

What valuable observations and marvellous experiments have been distorted and deformed by the constant and dangerous desire of laying the foundations of a new religion! Spiritist religion is inimical to science. I might borrow from the Bible the motto for all our studies: *Omnia in numero et pondere,* says the preacher —an admirable principle, applicable to all science and the very negation of religious mysticism.

If a creed be needed, it is the creed of truth—naked truth—without adornments and without verbiage. Let us verify phenomena, and try to link them together by any theory that has as much verisimilitude as possible, but let us never sacrifice the facts which are certainly true to the theory, which is probably false.

No doubt metapsychic phenomena often seem to impel us to nebulous inferences as to human immortality, to emanations from an unknown Will, to reincarnation, and to fluidic projections from the living or the dead. I have endeavoured to set aside these premature theories, though I have not been able to do this entirely. What purpose has been served by the ponderous volumes on alchemy before Lavoisier? He did achieve more with his scales than did all the dissertations of Goclenius, Agrippa, and Paracelsus. If we desire that metapsychics should take rank as a science, let us first establish its facts on a solid foundation. Our successors will go further, no doubt, but our duty today is less ambitious; let us have the intellectual modesty that befits our ignorance.

Nevertheless, in certain respects metapsychics cannot be compared with any other science. No intelligence is apparent in the various modes of energy, whereas both in objective and subjective metapsychics the phenomena seem due to some kind of intelligence. The intelligence that pertains to metapsychic things may be purely human; but if so it proceeds from a region of human intelligence quite unknown to us, since it reveals things that our senses cannot reveal and acts upon matter otherwise than by muscular contraction. In any case the province of metapsychics differs from that of all other forces, these latter being certainly

blind and unconscious. Perhaps it may eventually be proved that the metapsychic forces producing the phenomena are as unconscious as electricity and heat. Then metapsychics will form a branch of physics and psychology. This would be a great advance, and far from being saddened thereby we should rather be glad; for there is a real mental intellectual distress, felt by none more than myself, in the supposition that unknown, arbitrary, and capricious powers are the only ones endowed with intelligence.

But this day has not yet dawned and we must conclude provisionally: (1) That the metapsychic facts are real; (2) that they are to be studied like every other science without religious preoccupations, and (3) that they are seemingly directed by human or non-human intelligences whose intentions we can only partially perceive.

3. *Historical Summary*

Events and discoveries are so intermingled that any division into distinct periods is necessarily artificial. Nevertheless, this division must be made in order to throw some light on this obscure and tangled subject. I suggest, therefore, the following four periods:

1. The Mythical, up to Mesmer (1778).
2. The "Magnetic," from Mesmer to the Fox sisters (1847).
3. The Spiritist, from the Fox sisters to William Crookes (1847–1872).
4. The Scientific, which begins with William Crookes (1872).

May I venture to express the hope that this book will help to inaugurate a fifth, that of recognition as a science?

1. The Mythical Stage

It is for historians rather than for men of science to seek in ancient religions and popular traditions all that has been said on the supernatural, the occult, the magical, and the incomprehensible. The perusal of sacred books, cabalistic and magical works has but slight scientific interest.[1]

[1]An able and very detailed summary of these has been given by C. de Vesme, *Storia dello spiritismo,* 3 vols., Turin, Roux Frascati, 1896-1898. Translated into German, Leipzig, 1904. Its bibliography will be found with a brief analysis in a fine work by Albert Caillat, *Manuel bibliographique des sciences psychiques ou occultes,* 3 vols., Paris, L. Dorbon, 1913.

Miracles and prophecies have played a great part in nearly all religions. Real metapsychic phenomena, putting telekinesis for the miracles and premonitions for the prophecies, are perhaps at the root of some religious beliefs; but what can we build on stories that date back twenty centuries, transformed by ignorant and credulous priests? Dealing with a fact of the present day studied in a laboratory by skilled experimentalists with all modern technical instruments, we often hesitate to form any conclusions. How, then, can we affirm anything concerning an improbable event said to have taken place two thousand years ago before three fanatics and four adepts? Probably it is not entirely false; but we cannot discriminate between its falsehood and its truth. We shall, therefore, deliberately set aside the miracles of all religions, and all the prodigies connected with the death of Cæsar, of Jesus Christ, or of Mahomet.

Nevertheless there are, in this immeasurable period of credulity and ignorance, some facts worthy of mention.

Firstly, the very curious story of the dæmon of Socrates.

The two illustrious disciples of Socrates—Plato and Xenophon—state formally that Socrates claimed to have a familiar genius, a dæmon, who foretold events and sometimes prescribed his conduct. Even Socrates believed this being to be other than himself because it revealed things unknown. This dæmon was what spiritualists call "a guide."

In the *Theagetes,* Plato makes Socrates say: "By the favour of the Gods, I have, since my childhood, been attended by a semi-divine being whose voice from time to time dissuades me from some undertaking, but never directs me what I am to do. You know Charmides the son of Glaucon. One day he told me that he intended to compete at the Nemean games. . . . I tried to turn Charmides from his design, telling him, 'While you were speaking, I heard the divine voice. . . . Go not to Nemea.' He would not listen. Well, you know he has fallen."

In the *Apology for Socrates,* Xenophon attributes to him the words: "This prophetic voice has been heard by me throughout my life: it is certainly more trustworthy than omens from the flight or the entrails of birds: I call it a God or a dæmon. I have told my friends the warnings I have received, and up to now the voice has never been wrong." Socrates frequently insisted that the predictions of his familiar genius were always verified.

Throughout antiquity the story of Socrates's dæmon has always been perfectly well known.

Plutarch speaks of it: "Socrates having a pure and clear faculty of hearing could easily be affected, and this being so we may conjecture that what reached him was not a voice or a sound but the silent voice of a dæmon touching the intelligence of his soul. The intelligence of dæmons having its own light, shines upon those who are capable of receiving it, needing neither the names nor the words which men use in speaking to one another, by which they represent their ideas; but as for pure intelligences these are known only to those who have an inner and divine light."

Socrates, on hearing these voices, would break off his conversation, or stop in his walk, saying in explanation that he had heard the god.

Myers has written ably on this subject, comparing it (with good reason, as I think) to the voices heard from childhood by Jeanne d'Arc. He finds, however, only one instance of clairvoyance attributed to this dæmon: As the philosopher was in conversation with Eutyphron, he suddenly stopped and warned his friends to turn into another street. They would not listen; but misfortune overtook them—they met a drove of swine that jostled them and threw them down.

In his treatise *De Divinatione* Cicero speaks without reserve of predictions, as in the case of Socrates; but, strange to say, he expresses no astonishment. Without believing in it he does not reject it. He says, *De Legibus,* ii, 32, 33, "I think there veritably is a divination, that which the Greeks call *μαντικὴ*. If we admit that there are gods whose spirit governs the world and watches over mankind, I do not see why we should refuse credence to divination."

Referring to his brother Quintus he gives some instances of premonition, notably a dream of Quintus, in which he saw his brother Tullius fall from his horse (which was a fact). Tullius replied, "The anxiety you felt for me caused you to dream of me. The coincidence of the dream and the accident was a matter of chance"; and this answer appears to have satisfied Cicero.

Cicero gives an account (*De Divinatione,* i, 27) of another metapsychic phenomenon which I abridge as follows:

Two friends having arrived at Megara went to lodge, one in

an inn and one in a private house. The latter dreamed that his comrade called him to save him from an assassin. He awoke, thought it only a dream, and went to sleep again. But his friend appeared to him and said: "Since thou wouldest not save my life at least avenge me, se interfectum in plaustrum a caupone esse conjectum, et supra stercus injectum. . . . Hoc somnio commotus mane bulbulco praesto ad portam fuisse, quaesisse ex eo quid esset in plaustro, illum perterritum fugisse, mortuum erutum esse; cauponem, re patefacta, poenas dedisse." And Cicero, without being beyond measure astonished, remarks, "Quid hoc somnio dici divinius potest?" [1]

Further, in speaking of oracles, in which he nevertheless is inclined to believe, he says, Multa falsa, imo obscura, idque fortasse . . . nobis facilius evenit appropinquante morte, ut animi futura auguretur.[2] Tacitus (*Annals,* xi, 21) speaks of a vision that appeared to Curtius Rufus: Oblata ei species muliebris ultra modum humanun et audita est vox.[3]

A search through history would reveal many facts of a metapsychic nature; but no serious inferences can be drawn from them. Who today would venture to speak seriously of Simon Magus, or Apollonius of Tyana, even of Cardan or Cornelius Agrippa? Magi, magicians, and mystics have no place in the science of today, nor in sane metapsychics as now understood.

The apparition to Brutus, recounted by Plutarch, deserves mention: "A little before he left Asia he was sitting alone in his tent, by a dim light, and at a late hour. The whole army lay in sleep and silence, while the general, wrapped in meditation, thought he perceived something enter his tent: turning towards the

TRANSLATOR'S NOTE—The passages quoted may be rendered as follows:

[1]"That he had been killed and thrown into a waggon by the innkeeper and that manure had been thrown over his body. Alarmed at this dream in the morning he had waited for the waggoner by the gate (of the town) and had asked him what was in the waggon; the man fled, terrified, and the corpse had been uncovered. The innkeeper on the case being proved had paid the penalty."

What clearer proof of the intervention of Heaven can there be than this dream?

[2]Much is false, I should rather say unintelligible, and this (i.e., premonition) perhaps happens to us more readily on the approach of death, that the future of the soul may be forecast.

[3]There appeared to him the form of a woman of more than human size and a voice was heard . . . The context runs, Tu es Rufe, qui in hanc provinciam proconsule venies. "You are the man, Rufus, who will come to this province as proconsul."

door, he saw a horrible and monstrous spectre standing silently by his side. 'What art thou?' said he boldly. 'Art thou God or man, and what is thy business with me?' The spectre answered, 'I am thy evil genius, Brutus! Thou wilt see me at Philippi.' To which he calmly replied, 'I'll meet thee there.' When the apparition was gone he called his servants, who told him they had neither heard any voice nor seen any vision." (*Plutarch's Lives,* Brutus, Langhorne's translation.)

The voices and visions of Jeanne d'Arc belong also without doubt to the class of metapsychic phenomena. These voices and visions were perceived by herself alone, and must therefore be admitted as subjective. The explanation that they were hallucinations is much too easy, for they were followed by far too many real facts and by too frequent verification of their predictions to be accounted for by a disordered mind. It is impossible to doubt that Jeanne was truly inspired.

At the same time, as for the phantom seen by Brutus, the apparitions at Lourdes, and the miracles of Apollonius of Tyana and Simon Magus, any scientific appreciation of these ancient testimonies is impossible, and it is better to admit with F. W. H. Myers that it is probable that Jeanne possessed certain metapsychic powers, without claiming to give an exact definition of them.

There might be some profit in the study of hagiographies, for saintly persons have certainly exhibited very real metapsychic phenomena. Instances of aureoles about the head, bilocation, the "odour of sanctity," insensibility to fire, levitation, speaking in strange tongues, and prophecy are to be found in the lives of many saints: St. Francis d'Assisi, St. Theresa, St. Helena, St. Alphonso of Liguori, and St. Joseph of Copertino (1603–1663).

I set aside the stories of stigmata and all such organic phenomena, for these effects of mind—that is to say, of the central nervous system—on the circulation and nutrition of various parts of the body (the trophic nerves) do not fall within the province of metapsychics. It will suffice to refer to the many publications by medical men on this subject.[1]

[1]M. Apte, *Les stigmatisés, étude historique et critique sur les troubles vaso-moteurs chez les mystiques,* Th. de doctorat, Paris, 1903. Kohnstamm, *Hypnotische Stigmatisierung* (*Zeitschr. f.d. Ausbau d. Entwicklungslehre,* 1908, ii, 314-321). Görres, *La mystique divine, naturelle et diabolique,* trad. fr., Paris, 1854, ii, 174-210. Bourneville, *Science et miracles, Louise Lateau,*

But I hesitate to deny all the ancient instances of levitation; Görres cites no less than seventy-two cases, and states, moreover, that he does not give all of them. But it is impossible to determine how much truth there is in these miracles. The saint who had most is certainly St. Joseph of Copertino, beatified in 1753. Of him Görres says, "His ecstasies and ascensions were witnessed not only by the people and the members of his order, but Pope Urban VIII saw him one day in this state and was intensely astonished. Joseph bethinking himself that he was in the presence of the Vicar of Christ fell into an ecstasy and was raised above the ground."

For a long time, and even today, it has been the custom to scoff at these superstitions—the levitations of saints, somnambulistic predictions, premonitions of death by dreams, ecstatic healings, stigmata, haunted houses, apparitions, and the like—lumping them together with unmeasured contempt as unworthy of any examination.

This seems to me a grave error. Assuredly everything in these stories is not true, but neither are they entirely false. The strange stories we hear provoke an incredulous smile and one is apt to think the narrator not quite sane. But that is not so, neither is he lying. The stories told us are scarcely ever lies and very rarely complete illusions. People exaggerate, alter, arrange their accounts, forget essential details and add imaginary ones; but all these legends contain some fragment of truth. The history of the sciences shows that it has often been necessary to return to notions once thought to be puerile. The very existence of hypnotism and of spiritualism shows that mere denials without examination, instead of aiding, tend to fossilize science—routine rather than the desire of progress dominating the minds of those who claim to be scientific. But for detail of all these legends, from which we can scarcely hope to extract the truth imbedded therein, I refer readers to the work of Görres.[1] It is very complete, though naturally his credulity is limitless. It

ou la stigmatisée belge, Paris, 1875. Carré de Montgéron, *La vérité des miracles opérés par l'intercession du diacre, Paris,* ii, Cologne, 1747. Alfred Maury, *La magie et l'astrologie,* Paris, 1895. P. Janet, *Bulletin de l'Institut psychologique international,* July, 1901. A. de Rochas, *A. S. P.,* January, 1903.

[1] I endeavoured to analyze a very curious old instance of "possession" at Presburg in 1641, but could deduce nothing. (*Phénomènes métapsychiques d'autrefois, A. S. P.,* 1905, pp. 197-217; 413-421.)

is, however, interesting to note that nearly all present metapsychic phenomena are to be found in it.

The naïve imagination of the Christians of those days does not refer all these metapsychic powers to God and good angels: the devil also is capable of many marvels when he takes *possession* of some unlucky woman: he is nearly as powerful as God, and confers wonderful powers on his victim:

1. The power of perceiving the thoughts of others, even when not expressed;
2. Knowledge of languages unknown to the possessed and the ability to speak them;
3. Knowledge of future events;
4. Knowledge of events at a distance beyond the limits of sight;
5. Suspension in the air (levitation).

All these are real metapsychic phenomena; it is therefore credible that such things should have occurred now and again, alike to the saintly and the possessed, in all times.

Even divining tables are mentioned in antiquity (Mensæ divinatoriæ). Tertullian speaks of chains and tables for divination, and adds that this is a common fact (Figuier, *Histoire du merveilleux*, Paris, 1873, i, 18). According to Ammianus Marcellinus a table was made and on it was placed a slab engraved with the twenty-four letters of the alphabet. A ring suspended by a thread was held over it which swung to certain letters. These being written down gave an oracular message.

2. The "Magnetic" Stage[1]

With Mesmer all changes: he introduced *animal magnetism*, which, though not to be confounded with metapsychics, is closely allied to it.[2] In 1766 Anton Frederic Mesmer (1723-1815) produced, as his thesis for a medical degree, an essay on the physiological influence of the planets. During the next ten years

[1]On Mesmer's work and the origins of magnetism see the remarkable article by Ochorowicz, *Hypnotism*, in the Dictionnaire de Physiologie, C. Richet, Paris, 1909, viii, pp. 709-777; also K. Kiesewetter, *Geschichte des neueren Occultismus; geheimwissenschaftliche Systeme von Agrippa bis Karl du Prel*, second edition, Leipzig, 1907. The bibliography of animal magnetism and hypnotism will be found in M. Dessoir's book.

[2]Cf. Figuier, *Histoire du merveilleux*, Paris, 1873, i, 18.

he studied, endeavouring to harmonize astronomy and medicine, and to bring himself to notice. In 1778 he came to Paris and published his first didactic work. It was immediately apparent that new and extraordinary facts were involved. He rose into vogue. The Royal Society of Medicine, the Academy of Sciences, and the Faculty took the matter up and showed that Mesmer's methods gave rise to a certain psycho-physiological state which might sometimes be efficacious in the curing of disease.[1]

The new doctrine obtained numerous adherents among doctors, magistrates, gentlemen, and scientists. Animal magnetism was commonly practised. Puységur, aided by d'Eslon and Deleuze, the librarian of the Jardin des Plantes, modified the methods of Mesmer and created animal magnetism (induced somnambulism), such as we know it today. Mesmer, by adopting the word "magnetism," only meant action at a distance, just as Paracelsus and Goclenius treated of the "magnetic" action of planets or of substances. In this sense Mesmer was nearer to metapsychics than his immediate successors.

With Puységur, d'Eslon, and Deleuze magnetization became a therapeutic method, though henceforth metapsychic facts—action at a distance, vision through opaque bodies, clairvoyance or lucidity—were observed facts; but strangely enough nearly all the efforts of the magnetizers were concentrated on the diagnosis and cure of disease. Pététin, a physician of Lyons, cited a number of cases of cryptesthesia which he attributes naïvely to epigastric sensibility: one of his cataleptic patients could distinguish and name a card placed on the epigastric region. Pététin is one of the old-time magnetizers who studied the psychological, or rather metapsychic, phenomena that so often accompany hypnosis, with special care.

Baron du Potet, and Husson, a physician of the Paris Hospital and a member of the Academy of Medicine, made, in 1825, some remarkable experiments on somnambulism induced from a distance. A notable report was presented by Husson to the Paris Academy of Medicine, and appeared in 1833.[2]

[1] *Mémoire sur la découverte du magnétisme animal,* Paris, P. F. Didot, 1779. Ochorowicz has done full justice to Mesmer who was a genuine discoverer and forerunner.

[2] Maxime de Puységur, *Rapport des cures opérées à Bayonne par le magnétisme animal,* Bayonne, 1784. *Mémoires pour servir a l'établissement du magnétisme animal,* Paris, 1820. Deleuze, *Histoire critique de magnétisme*

Among the conclusions adopted, I give the following, which will seem bold, even today:

"An effort of will or a fixed gaze has sufficed to produce magnetic phenomena, even when the subject was unaware.

"A somnambulic state may give rise to new faculties, designated as clairvoyance, intuition, or interior prevision.

"By an effort of will it is possible not only to act on the patient, but even to induce complete somnambulism and to dispel it, unknown to and out of sight of the patient, through closed doors.

"We have seen two somnambulists with closed eyes distinguish objects placed before them; they have named the color and value of cards, have read words of script or some lines in books selected at random, and this when the eyelids were held down with our fingers."

In spite of these declarations the scepticism of official science prevailed. Husson's report was disputed and then forgotten, and the metapsychic phenomena were taken up by novelists, and denied or disdained by men of science.

In Germany Justinus Kerner,[1] physician and poet, studied for a long while Federica Hauff, a medium whose extraordinary faculties were well worthy of attention. Federica Hauff was undoubtedly a powerful medium; she saw spirits and produced materializations. "One day," says Kerner, "I was conversing with her brother, when he said: *'Hush! a spirit is crossing the room going toward my sister.'* Then I saw a vague form like a luminous column about human height standing at the foot of the bed of the seeress, whispering to her."

Around her spontaneous rappings were heard, and she could even cause them on neighbouring objects, on tables, and on the

animal, 1813. Pététin, *Electricité animale, mémoires sur la catalepsie.* Foissac, *Rapport et discussions sur le magnétisme animal,* Paris, 1825. Deleuze, *Instruction pratique sur le magnétisme animal.* Final edition, Paris, 1853.

There is, however, a posthumous work by Deleuze, *Mémoire sur la faculté de prévision,* with notes by M. Mielle, Paris, 1834.

Rapports et discussions de l'Académie royale de médecine sur le magnétisme animal, Paris, 1833.

[1]*Die Scherin von Prevorst, Eröffnungen über das innere Leben d. Menschen und über das Hereinragen einer Geisterwelt in die unsere,* Stuttgart, 1829, fifth edition, Stuttgart, 1877. *Die Seherin von Prevorst und ihre Geschichte in der Geisterwelt, nach Justinus Kerner von einem ihrer Zeitgenossen,* Stuttgart, 1869. A. Reinhard, *Justinus Kerner und das Kernerhaus, zu Weinberg,* Tubingen, 1886. J. Kerner, *Blätter aus Prevorst Originalien und Lesefrüchte für Freunde des innern Lebens,* Stuttgart, 1831-1839.

wood of her bed. Different objects moved without contact, she was levitated, and seems to have spoken in unknown tongues.

It was only during the years from 1826 to 1829 that these remarkable phenomena were observed; during the whole of this time she was very ill and could scarcely leave her bed. All who studied Federica Hauff (such as the Magistrate Pfaffer and Strauss, the celebrated author of the *Leben Jesu*), instead of ridiculing her, were convinced not only of her good faith but of the metapsychic phenomena—then called supernatural.

At this time there appeared, also in Germany, the works of Reichenbach. These are obscure physiological rather than metapsychic records, for the action of steel magnets on organic bodies must not be confused with cryptesthesia or telekinesis. Unfortunately the work of Reichenbach has been more disputed over than studied.

Belonging strictly to the metapsychic domain were the observations made in France on lucid somnambulists such as Mme. Pigéaire[1] and Alexis Didier, but men of science, with the rarest exceptions, concerned themselves with somnambulism only to try to disprove it. Their attitude is easily understandable: somnambulic consultants, lucid or super-lucid, appeared in every town, both in France and abroad, exploiting the alleged healing virtues of magnetism. They were to be found at every fair, plying a dubious trade; they told fortunes by cards, they saw the future in coffee-grounds, and practised palmistry.

Credulous people visited them and men of science shrugged their shoulders. In such a medley, the clairvoyance of persons like Mme. Lenormand, Mme. Pigéaire, and Alexis Didier was lost, though some serious notices were published.[2]

[1]A. de Rochas has published part of these in French with some interesting notes.

[2]Du Potet, *Essai sur l'enseignement philosophique du magnétisme animal*, Paris, 1845. Lafontaine, *L'art de magnétiser ou le magnétisme vital considéré sous le point de vue théorique, pratique et thérapeutique*, Paris, 1847. Fifth edition, 1887. A. Bertrand, *Du magnétisme animal en France, suivi de considérations sur l'apparition de l'extase dans les traitements magnétiques*, Paris, 1826. Teste, *Manuel pratique du magnétisme animal*, Paris, 1840. Elliotson, *Animal Magnetism, Lancet*, 1837, 1838, pp. 122, 282, 377, 400, 441, 516, 546, 615, 634. Esdaille, *Reports of the magnetic hospital, Calcutta*, 1848, p. 761. Passavant, *Untersuchungen über den Lebenmagnetismus und das Hellsehen*, second edition, Franckfurt A. M., 1837.

Many journals, mostly ephemeral, appeared; others survived a considerable time. The *Journal du Magnétisme*, edited by Du Potet, 1845-1885. The

3. The Spiritist Stage

In 1847 an event took place, apparently insignificant, but really of considerable import, introducing unforeseen facts and equally unforeseen doctrines.

Animal magnetism, being of doubtful therapeutic value, was making no progress. The coming of spiritism with its new methods and new theories inaugurated a new era. This is the third period in the development of metapsychic science. It runs from 1847 to 1872.

In 1846, in the little town of Hydesville (Arcadia) near New York, one Michael Weakman heard an unusual noise outside. He went out and saw nothing; but as the noises continued and disturbed him, he left Hydesville. His house was taken by John Fox and his two daughters, Kate and Margaret, aged twelve and fourteen. One night on going to bed the two girls heard noises and raps, and discovered (December, 1847, and March, 1848), that these showed intelligence.

The phenomena soon developed, and several persons verified that these intelligent rappings bore witness to certain facts that had been kept secret. In August, 1848, the Fox family left Hydesville for Rochester. Leah Fish, the elder sister of Kate and Margaret, joined them for spiritualist manifestations.

Isaac Post suggested the use of an alphabet to converse with these unknown powers which stated that they were spirits.

Many gatherings, sometimes enthusiastic, sometimes hotly inimical, were held to verify the facts announced by the Fox sisters, who were becoming more and more notorious. The first scientific enquiry seems to have taken place at St. Louis (Missouri), in June, 1882; it appears to have reported favourably. Nevertheless the Fox family were certainly not disinterested; public séances were given at which places were paid for as at a circus.

All these early stages of spiritualism, arising in the first place from chance, and then pushed by shameless commercialism, are very sordid.[1]

Zoist, a journal of cerebral physiology and mesmerism and their application to human welfare, London, 1843-1853. *Archiv für den thierischen Magnetismus,* Altenburg and Leipzig, 1817-1822. Others might be cited.

[1]It is, however, to be noted that the admirable discovery of surgical anesthetics, also made in America, offers analogous features. It arose by a

But the start was made. First in America, and afterwards in Europe, the practice of table-turning and spiritualist doctrines made extraordinary progress during the next three years. As for animal magnetism in 1780, so for table-turning in 1850, an amazing infatuation set in; but it is simply puerile to see in this nothing more than a huge and collective illusion. Moreover, some reasoned conclusions were blended with the fanatical credulity of blind and ignorant masses, and the equally blind and ignorant denials by scorners. It was soon found that the phenomena of raps and telekinesis could be observed with other mediums than the Fox sisters.[1]

Among these reasoned conclusions none was more influential than those of Judge Edmunds, a senator respected throughout the United States for probity and sagacity.

The mental instability of mediums is, for the most part, such that their affirmations, whether positive or negative, have but small value. That the Fox sisters, after the enormous development of spiritualism that followed on their early demonstrations, should have tricked is possible or probable, not to say certain.

There are many instances of very strong mediums who presented at first authentic phenomena, but later on, urged by cupidity or vanity, finding their powers failing, have supplemented them by fraud. It is difficult to suppose that the phenomena of rapping, which is certainly true, should have been

chance and immediately Horace Wells and Morton took out a patent in order to draw profit from the discovery; but this greed of gain detracted nothing from its reality. O. and W. Wright patented their aëroplane, but this did not diminish the value of their invention.

[1]A singular result followed. Margaret Fox, then become Mrs. Kane, avowed in 1888 that all her revelations as a child and a young woman were impostures. The sitting of the Musical Academy of Boston at which she made this astonishing declaration provoked great indignation. The other sister, Kate, then Mrs. Joncken, afterwards Mrs. Sparr, and addicted to drink, made the same confession in November, 1888, at Rochester. But in 1892 both Margaret and Kate retracted their confessions. These unfortunate facts prove nothing but the mental frailty of mediums.

In fine, when a fact has been affirmed, it is not enough merely to say that there was lying and trickery; it must also be shown how the trick was carried out. A Mr. Blackman has told (*Confessions of a Telepathist, J. S. P. R.*, October, 1911, p. 116) how he in collusion with G. A. Smith deceived Gurney, Myers, Podmore, H. Sidgwick, and Barrett. But in this so-called exposure he certainly told some lies. I believe, too, that Marthe Béraud once told a certain lawyer at Algiers that she had tricked at the Villa Carmen; but later on she denied this, and her statements have no value either way. A curious chapter might be written on the pseudo-confessions of mediums.

invented by the Fox sisters without being real.[1] Before 1847 these rappings were unknown; then these two young girls come on the scene and give striking examples of them.

Then the same phenomenon is verified far and wide, and after many such instances the girls say they were lying! It is probable that the denial is the lie, and that seeing public favours and money diminishing they thought to regain notoriety for their puny personalities by a recantation.

In 1847 Margaret was fifteen and Kate twelve. Can we suppose that these two children organized a fraud that was tested thousands of times during seventy-five years? The reality of rappings does not depend on the Fox sisters. In 1888 it was too late for denial and their recantation proves nothing.[2]

It is deplorable that from 1849 onward the Fox family should have given theatrical spiritist performances for payment, but this no more invalidates the facts than the patents taken out by Wells and Morton for the use of ether contradict the facts of anesthesia.

The rapid development of spiritualism cannot be traced here. A petition signed by fourteen thousand persons was presented to the Senate of the United States in 1852, asking for a scientific commission of enquiry. It had become a new religion; spiritualist circles and journals were numerous.

Among the early American spiritualists, besides Edmunds, must be placed Professors Britten, David Wells, Bryant, Bliss, all of the University of Pennsylvania, and above all others Dr. Robert Hare,[3] professor of chemistry at Harvard, convinced after having been sceptical.

In Europe spiritualism spread very rapidly; not without stirring up lively opposition. Scientific men, especially, refused to admit the actuality of the phenomena, and to explain the undeniable facts of raps and table-turning, they invented compli-

[1]According to J. Maxwell (*Les Sciences psychiques, Revue de Paris,* March 1, 1921) the bishop, Adrien de Montalembert, seems to have verified that such raps took place with a nun of Lyons.

[2]The experiments by Aksakoff and Boutleroff with Kate Fox (of little interest now) are mentioned further on (*A. S. P.*, 1901, xi, 192). For further details in the history of spiritualism, see E. Morselli, who gives abundant and precise details (*Psicologia e spiritismo,* Turin, 1908, i, 12-27).

[3]Hare, *Experimental investigations of the spirit manifestations demonstrating the existence of spirits and their communications with mortals,* Philadelphia, 1856. Makan, *Modern mysteries explained and exposed,* Boston, 1855 (University).

cated theories, and gave explanations, some of which were quite correct, and others subtly erroneous.[1]

At that time, about 1854, the phenomena of unconscious muscular action, quite established today, was unknown. The credit of an ingenious and rational explanation belongs to Chevreul. He was supported by Babinet, Faraday, Carpenter, and by nearly all physiologists and physicians.[2]

In point of fact the study of table-turning is one of the most difficult in objective metapsychics, for nothing is harder than to determine the part played by the unconscious in the oscillatory movements of the table. Even when the good faith of the experimenters is not in doubt, they evidently cannot be held responsible for unconscious and involuntary muscular contractions. Therefore it was not possible at that time to prove in an unimpeachable manner that movement could be produced without muscular contraction.

Similarly for the raps. An eminent physiologist, M. Schiff, showed in his own person that a crack, comparable to the raps supposed to be produced by spirits, could be made by muscular displacement of a certain tendon. This infantile explanation that we smile at today was well received by scientists who probably had never heard the raps which cause wood to vibrate sometimes loudly, sometimes with musical rhythm, and have nothing in common with the snappings of a tendon, even supposing that other persons than the illustrious Florentine physiologist can produce them. His assertions had been preceded by those of

[1]See De Mirville, *Pneumatologie des ésprits et de leurs manifestations diverses (fluidiques, historiques, etc.)*, Paris, first edition, 1853, fifth edition, 5 vols., 1863-1864. Gasparin, *Des tables tournantes, du surnaturel en général, etc.*, Paris, 1854. Thiery (2) *Les tables tournantes considérées au point de vue de la physique générale*, Geneva, Kessmann, 1855. E. Hornung, *Spiritualistiche Mittheilungen aus der Geisterwelt*, Berlin, 1859 and 1862. C. Kiesewetter, *Die Entwickelungsgeschichte des Spiritismus von der Urzeit bis zur Gegenwart*, Leipzig, Spohr, 1893. Leymarie, *Histoire du spiritisme, compte rendu du congrès spirite de 1889*, Paris, librarie spirite, 1890, pp. 3-45. Malgras, *Les pionniers du spiritisme*, Paris, Lib. des sciences psychologiques, 1906.

[2]Chevreul, *De la baguette divinatoire, du pendule explorateur, et des tables tournantes*, Paris, 1854. Babinet, *Etudes et lectures sur les sciences d'observation*, Paris, 1856. Carpenter, *Principles of mental physiology and psychological curiosities of spiritualism* (*Pop. Sci. Monthly*, 1877, iii, 128). Faraday, *The table-turning delusion, Lancet*, 1853. Cumberland, *Fraudulent aspects of spiritualism, Journal of Mental Science*, 1881, xxvii, 280-628. Morin, *Le magnétisme et les sciences occultes*, Paris, 1855. See also on Faraday's work the recent article by Fr. Grünewald, *Faraday über d. Tischrücken, Psych. Stud.*, 1920, xlvii, 151, 295, 298.

Flint,[1] another distinguished physiologist, who, after observation of the Fox sisters, attributed the raps to the crackings of their knee-joints.

Spiritualists made but poor replies to these experimental objections; they ought, as was done later, to have met them by experiment. Instead, they put forward theories and started a new religion.

This theorization of spiritism was mainly due to L. H. D. Rivail (1803-1869), a doctor of medicine scarcely known under the name of Rivail, but celebrated under the pseudonym of Allan Kardec.[2]

The spiritist theory of Allan Kardec is simple enough: The soul does not die; after death it becomes a spirit and seeks to manifest through certain privileged beings (mediums), capable of receiving directions and impulses from spirits; the spirit seeks reincarnation, i.e., to live again in a human form, of which it is the soul; all human beings pass through successive transmigratory phases, as Pythagoras had previously taught; their "perisprit" can, under certain exceptional circumstances, materialize; they know the past, the present, and the future. Sometimes they materialize and can act on matter; from the moral point of view we should let ourselves be guided by good spirits who lead us towards right, and refuse to listen to bad spirits who lead us into error.

The intellectual energy of Allan Kardec deserves unfeigned admiration. Despite an exaggerated credulity he puts his faith in experiment, and rests on that, so that his work is not only a far-reaching theory but also a great collection of facts.

This theory has, however, a deplorably weak side. The whole fabric of his system (which is that of spiritualism in general) is based on the astonishing hypothesis that mediums, embodying a so-called spirit, are never mistaken, and that automatic writings, unless prompted by evil spirits, reveal verities to be ac-

[1] A. Flint, *On the discovery of the source of the Rochester knockings, and on sounds produced by the movements of joints and tendons, Quart. Journ. Med. Sci.,* New York, 1869, iii, 417-446. Schiff, *Comptes rendus de l'Acad. des Sciences,* April 18, 1859. Jobert, Velpeau, Cloquet, discussion on the same, *ibid., passim.*

[2] *Livre des esprits,* Paris, 1857, first edition. *Livre des médiums,* Paris, 1861, first edition. More than thirty editions have been issued of these celebrated books which have been translated into all languages. Allan Kardec was also the founder of the *Revue Spirite,* now in its thirtieth year.

cepted. If, then, we were to follow Kardec's theory, we must take at face-value all the divagations of the subconscious, which, with some exceptions, show a very primitive and puerile intelligence. To build a doctrine on the word of so-called spirits is a very grave error. Nevertheless no influence between 1847 and 1871 was comparable to that of Allan Kardec, and no one has made a deeper impress on metapsychic science.

Spiritualism was defended in England by Robert Dale Owen and by Alfred Russel Wallace.[1] Wallace was the man whose genius anticipated Darwin's work; his books bear witness to his courage, for indeed much courage was required to write in defence of a science that had so little scientific character.

In Germany Zöllner stood alone. The time was ripe for the appearance of the great pioneer of metapsychic science—Sir William Crookes.

4. The Scientific Stage

Great as were the merits and the courage of Crookes, he was preceded by the members of the Dialectical Society of London who, to the number of thirty-six, met at the suggestion of Edmunds, in January, 1869, to study mediumistic phenomena scientifically. Among them was the engineer, Cromwell Varley, the distinguished naturalist, Russel Wallace, and an acute lawyer, Serjeant Cox, all of whom seem to have played a leading part. Well-known scientists such as Tyndall and Carpenter declined to participate, and there were dissidents among the commission itself; notably Lubbock and Huxley, who opposed the report of the majority.[2]

The facts verified by the Dialectical Society were surprisingly evidential: they did not, however, secure scientific assent, but they had one excellent result—they impelled William Crookes to study the question. Fortunately he had the assistance of two powerful mediums with whom to experiment—Florence Cook and D. Dunglas Home.

[1]R. D. Owen, *Footfalls on the boundary of another world,* Philadelphia. 1877; *The debatable land between this world and the next,* New York and London, 1871. A. Russel Wallace, *A Defence of Modern Spiritualism* (*Fortnightly Review*), London, 1874, xv, 630-657. *The Scientific Aspect of the Supernatural,* London, 1866. *On Miracles and Modern Spiritualism,* London, 1873.

[2]Report on Spiritualism by the Committee of the London Dialectical Society, together with the evidence oral and written, and a selection from the correspondence. (Longmans, London, 1871.)

Crookes was then thirty-seven years old, in the full vigour of his age and powers. He had already a high scientific standing. In 1863 he had discovered a new metal—thallium—and had done distinguished work in spectroscopy, astronomy, and meteorology. He was editor of the *Chemical News* and of the *Quarterly Journal of Science,* when he decided to study Home's remarkable powers.

From 1869 to 1872 he published articles contrasting strongly by the precision of their language and severe experimental method with the usual style of spiritualist publications. It was the beginning of the scientific period. "I do not say that these things are possible. I say that they exist," said Crookes.[1]

The idolatry of current ideas was so dominant at that time that no pains were taken either to verify or to refute Crookes's statements. Men were content to ridicule them, and I avow with shame that I was among the wilfully blind. Instead of admiring the heroism of a recognized man of science who dared then in 1872 to say that there really are phantoms that can be photographed and whose heartbeats can be heard, I laughed.

This courage had, however, no immediate or considerable effect; it is only today that Crooke's work is really understood. It is still the foundation of objective metapsychics, a block of granite that no criticism has been able to touch. At the close of a laborious and distinguished life he said, "I have nothing to withdraw of all I have borne witness to."

Henceforward spiritualists will know that experiment is the path of progress, rather than religious or mystical speculation. The whole subject should now be an experimental science, sceptical of theories and as exact on its own lines as chemistry, physics, or physiology.

Animal magnetism has passed through a similar evolutionary stage. Since Puységur, Deleuze, and Du Potet it has made no progress. James Braid of Manchester, by calling it hypnotism did not change its mystical aspect nor its unfortunate association with medicine. The result was that the doctors and physiologists

[1]Many of his writings are polemical; I will only cite the following: *Experimental investigations on psychic force,* London, Gilman, 1871. *Researches on the phenomena of spiritualism,* London, Burns, 1894. *On Psychical Research,* Report Smithsonian Institution, Washington, 1898-1899. pp. 185-205. *Psychic force and modern spiritualism, A reply to the Quarterly Review and other critics,* London, 1872.

of 1875 gave little more credence to it than to the materializations of Katie King.[1]

In 1875, while still a student, I was able to prove that we are here concerned with a phenomenon of normal physiology; that the intelligence in this induced state remains intact and is sometimes super-excited, and that there is no need to imagine any magical or magnetic action. Some years later I gave the first examples of duplicated personalities, hinted at by Philips and Azam.[2] These changes of personality throw much light on so-called spiritualist phenomena.

Nothing that I said in my article of 1875 was entirely new; the old magnetizers had seen the same facts. So also when Crookes established the reality of phantoms, he said scarcely anything that had not already been stated by spiritualists. The novelty consisted in rigorous application of experimental method to phenomena till then imperfectly verified and only partially studied, and therefore given no place in science.

Following on my article many experiments were widely made, and animal magnetism ceased to be an occult science.[3]

The efforts of those who study metapsychics should now be directed to bringing this science out of the category of the occult, as animal magnetism has been brought.

Another noteworthy event, as important as Crookes's work, was also of British origin. The Society for Psychical Research[4] was

[1]J. Braid, *Neurypnology, or the rationale of nervous sleep considered in relation with animal magnetism.* Illustrated by numerous cases of its successful application in the relief and cure of diseases, London, Churchill, 1843. New edition, 1899. *Power of the mind upon the body,* London, 1846. Translated into French and German.

[2]Ch. Richet, *Du somnambulisme provoqué. Journ. de l'anat. et de la physiologie,* 1875, xi, 348-378. *Revue philosophique,* 1880, x, 337-384. *A. F. pour l'avancement des sciences,* Reims, 1881, ix, 50-60. Azam, *Le dedoublement de la personnalité. Rev. scientif.,* 1890, xlvi, 136-141.

[3]Heidenhain, *Zur Kritik hypnotischer Untersuchungen. Breslau aertztl.* Zeitschrift, 1880, 52-55, and *Revue scient.,* 1880, xviii, 1187-1190. Chambard, art. *Somnambulisme du Dict. encycl. des Sc. Médicales.*

I need not here mention the observations of Charcot and Bernheim, both subsequent to my article of 1875, and manifestly prompted by it (1878-1885). The very interesting history of suggestion does not pertain to metapsychics.

The complete bibliography up to 1902 will be found in the article *Hypnotism,* in the Index Catalogue (2), 1902, vii, 743-766. (See also Morselli, *Il magnetismo animale, la fascinazione, gli stati hypnotici,* second edition, Turin, 1886.)

[4]The presidents of this society have been Henry Sidgwick, 1882-84-92; Balfour Stewart, 1885-87; A. J. Balfour, 1893; William James, 1894-95;

founded by the persevering efforts of E. Gurney and F. W. H. Myers. A group of eminent persons drew together to make investigations in the despised region of occultism, in order to discover by rigorous scientific method the truths underlying these strange facts. Thence has grown a colossal assemblage of facts, experiments, and theories that has furnished data for the metapsychic science of today.

This scientific reform was not limited to England. In France a similar effort was made, following the example of Gurney and Myers, though with lesser resources and fewer adherents. With the help of Th. Ribot and L. Marillier the *Société de psychologie physiologique* was founded. Its existence was brief, for it aimed at arousing interest in metapsychic research among psychologists, physiologists, and physicians. They declined to take it seriously. I then, with Dariex, founded the *Annales des Sciences Psychiques* (1890-1920), C. de Vesme subsequently becoming the zealous editor. This is now replaced by the *Revue Métapsychique* directed by Geley, holding a just mean between the credulity of the spiritualist publications and the blind ignorance of the journals of official psychology.

However, important as are the psychical societies, and useful as are their publications, their value still depends on experimental research by single individuals. There can be no psychical research without a medium. The function of such societies is to prevent the powers of remarkable mediums being lost to science in unmethodical séances held without rigorous supervision.

Between 1885 and 1920 there were many powerful mediums: Slade, Eglinton, Stainton Moses, Eusapia, Mme. d'Espérance, Mrs. Thomson, Marthe Béraud, Stanislawa Tomczyk, Miss Goligher, and Mrs. Leonard; but if I had to cite only two out of these, I should take Mrs. Piper for subjective, and Eusapia Paladino for objective phenomena.

William Crookes, 1896-99; F. W. H. Myers, 1900; Oliver Lodge, 1901-03; Sir William Barrett, 1904; Charles Richet, 1905; G. Balfour, 1906-07; Mrs. H. Sidgwick, 1908-09; A. Arthur Smith, 1910; Andrew Lang, 1911; Carpenter, 1912; H. Bergson, 1913; Schiller, 1914; Gilbert Murray, 1915; Professor Jacks, 1917; Lord Rayleigh, 1919; W. McDougall, 1921.

The Proceedings published by Trübner & Co. form twenty-eight volumes, to which must be added the Journal (1884-1920), printed for private circulation. A very good index appeared in 1904, giving the chief cases referred to in *Phantasms of the Living* and in the Proceedings of the American S. P. R. The headquarters of the S. P. R. are at 20 Hanover Square.

Mrs. Piper, of Boston, studied with extraordinary patience by William James, and afterwards by R. Hodgson, and then with equal perseverance by Hyslop, and also by F. Myers, Sir Oliver Lodge, and Sir William Barrett, has powers of clairvoyance and cryptesthesia probably greater than any before observed. She tells those who visit her, at once, and almost without hesitation, the names of their relatives, with episodes in their lives, unknown to her visitor, that can be verified only after long and painstaking enquiry.

If there were no other medium in the world but Mrs. Piper that would be sufficient to establish scientifically the facts of cryptesthesia.

Eusapia Paladino[1] has been studied hundreds of times by the leading scientific men of Europe. Schiaparelli, Porro, Aksakoff, G. Finzi, A. and F. Myers, O. Lodge, E. Feilding, Lombroso, A. de Rochas, Ochorowicz, J. Maxwell, A. de Schrenck-Notzing, C. Flammarion, Bottazzi, Morselli, Foa, Sabatier, A. de Watteville, A. de Gramont, Carrington, and many more have all verified with her the reality of movements without contact and materializations.

Even if there were no other medium than Eusapia in the world, her manifestations would suffice to establish scientifically the reality of telekinesis and ectoplasmic forms.

Both Mrs. Piper and Eusapia have always showed complete readiness to comply with scientific tests, accepting all control without taking offence. It is mainly through them that the development of metapsychic science in recent years has been possible. Scientific men of the future should recognize with gratitude the debt they owe to them and to their predecessors, D. D. Home and Florence Cook.

More recent experiments with Marthe Béraud, Stanislawa Tomczyk, and Miss Goligher have opened wide possibilities before objective metapsychics.

Thus metapsychics has acquired the right to be held a separate science under that name, differentiated from hypnotism on the one hand and from spiritualism on the other. I gave it this name and made this claim in 1905. Hypnotism is a nearly normal accompaniment in animal magnetism; it is an induced mental state such that normal consciousness is modified and transformed,

[1]The complete bibliography of publications relating to Eusapia has been given by Morselli under the suggestive title of *Bibliografia Paladiniana,* in a remarkable book, *Psicologia e spiritismo,* Turin, Bona, 1908, 134-170.

and new phases of consciousness, sometimes multiple, appear while the normal consciousness is asleep. But hypnotism still belongs to psychology, so that somnambulism only pertains to metapsychics on the emergence of faculties of cognition which do not exist at all in the normal state. To these faculties I have given the name of cryptesthesia.

It is in no way doubtful that cryptesthesia is developed by means of hypnotism, magnetism, and somnambulism, but metapsychics is concerned with hypnotism only through its intensification of cryptesthesia.

At the other pole of the so-called occult sciences is spiritualism; and here the facts must be dissociated from theories. Spiritualism, according to the formula of Allan Kardec and others, is a theory leading to a religion; but this takes us very far beyond science. Not that metapsychics should abjure all theory; no science, however young, can dispense altogether with theories, even hypothetical theories, but theory must always be subordinate to the facts; it must never dominate them and look on them as accessory to a religion. This was what the founders of metapsychic science—Gurney, Myers, and Crookes—endeavoured to achieve.

Neither the magnetizers nor the spiritualists should be contemned. That would be a grave injustice. They carried out laborious investigations that are the foundation of metapsychics, disregarding ridicule, hostility, and the rejection of their work by official science.

But we have reached a new stage. It is no longer admissible that a new medium should be developed by a small circle without the methods employed in all sciences—scales, photography, cinematography, and graphic diagrams. Similarly, rigorous and exhaustive enquiry, such as is carried out by the S. P. R., is indispensable for all subjective phenomena. Complete certitude is required, half-certitudes will not do.

In fine, modern metapsychics should be limited on the subjective side to the psychological phenomena that conscious human intelligence, however keen, is incapable of producing; and on the objective side to material facts produced apparently by intelligent causes that the known and classified natural forces (light, heat, electricity, gravitation, and mechanical power) are unable to explain.

In this brief historical summary I have not been able to indicate the work that has been done. Its bibliography is already

enormous. I should like, however, to indicate, to those who wish to study the spiritualism, the occultisms, and the metapsychics of the half century that has now elapsed, the chief works dealing with the subject, all of them useful and some indispensable. Only leading works are here mentioned:

Aksakoff, *Animismus und Spiritismus, Versuch einer Kritischen Prüfung der mediumnistischen Phaenomene,* Leipzig, Mutze, 1890, 4th ed., in two vols., 1902, trad. fr., *Libr. des sciences psychologiques,* 1895. E. Bozzano, *Ipotesi spiritica e teorie scientifiche,* Genova, Donath, 1903. A. Brofferio, *Per lo spiritismo,* 1st ed., Milano, Briola, 1892, 3d ed., Torino, Bocca, 1903, trad. all., Berlin, 1894. G. Delanne, *Le spiritisme devant la science,* Paris, Chanuel, 1895, 5th ed., 1897, *Les apparitions matérialisées,* Paris, Leymarie, 2 vols., 8vo, 1911. *Recherches sur la médiumnité,* Paris, 1896. Fr. Myers, *The human personality and its survival to bodily death,* London, Longmans, 2 vols., 8vo, 1902. Oliver Lodge, *La survivance humaine.* A. de Rochas, *L'extériorisation de la motricité,* Paris, Chanuel, 1896, 4th ed., 1906. *L'extériorisation de la sensibilité,* Paris, Chanuel, 1895, 5th ed., Chacornac, 1905. *Les états profonds de l'hypnose,* Paris, Chacornac, 1892. *Les états superficiels de l'hypnose,* Paris, Chacornac, 1902. J. Maxwell, *Les phénomènes psychiques. Recherches, observations, méthodes,* Paris, Alcan, 1905, *Metapsychical Phenomena,* London, Duckworth, 1905. E. Boirac, *L'avenir des sciences psychiques,* Paris, Alcan, 1907. *La psychologie inconnue,* Paris, Alcan, 1915. Carmelo Samona, *Psiche misteriosa: i fenomeni detti spiriticci,* Palermo, Reber, 1910. E. Flammarion, *Les forces naturelles inconnues,* Flammarion, Paris, 1907. *L'inconnu et les problèmes psychiques,* Paris, Flammarion, 1900. *La mort et son mystère,* Paris, 1920. Morton Prince, *A dissociation of personality,* Boston, Turner, 1906. Zöllner, *Wissenschafftliche Abhandlungen,* part iii, *Die transcendentale Physik und die sogenannte Philosophie,* Leipzig, Stachmann, 1878-1879. J. H. Hyslop, *Science and a future life,* Boston, Turner, 1905. Innocenzo Calderone, *La Rincarnazione,* Milano, édit. Veritas, 1913. Stainton Moses (Oxon), *The higher aspects of spiritualism,* London, 1880. *Spirit identity,* London (*Spiritualist alliance,* 1902). G. Geley, *De l'inconscient au conscient,* Paris, Alcan, 1919. *L'être subconscient,* 4th ed., Paris, 1919. J. Grasset, *L'occultisme hier et aujourd'hui,* Montpellier, Coulet,

1908. Osty, *Lucidité et intuition,* Paris, Alcan, s. d. Florence Marryat, *There is no death,* Leipzig, Heinemann, 1892. Chevreul, *On ne meurt pas,* Paris, 1914. S. Ottolenghi, *La suggestione a le facolta psichiche occulte in rapporto alla pratica legale e medico forense,* Torino, Bocca, 1900. Amiral Usborne Moore, *Glimpses of the next state,* London, Watts & Co., 1912. Du Prel, *Das Räthsel des Menschen,* Leipzig, Mutze, 1885, trad. it., Milano, Galli, 1894. *Monistische Seeleneehre; ein Beitrag auf Lösung des Menschenräthsels,* Leipzig, Günther, 1888. L. Denis, *Après la mort, exposé de la doctrine des esprits,* dern. éd., 1918, Paris, Leymarie, trad. ital., Milano, 1914. Fr. Podmore, *Modern spiritualism; a history and a criticism,* London, Methuen, 2 vols., 1902. Wahu, *Le spiritisme dans l'antiquité, et dans les temps modernes,* Paris, Leymarie, 2 vols., 1885. Schrenck-Notzing, *Physikalische Phaenomene des Mediumnismus,* Munich, Reinhardt, 1920.

Some idea of the volume of metapsychic literature may be formed by adding to this short bibliography, which I shall have occasion to supplement in the course of the present work, the important articles published in *Light* (London), in the *Banner of Light* (Boston), *The Religio-philosophical Journal* (New York), the *Harbinger of Light* (Melbourne), the *Revue Spirite,* Paris, *Revue scientifique et morale du spiritisme* (Paris), the *Luce e Ombra* (Milan, a noteworthy record), the *Zeitschrift für Spiritismus* (Leipzig), and *Psychische Studien* (Berlin).

I cannot mention all the books that have appeared since 1920 on metapsychics; it will suffice to quote the following:

C. Flammarion, *Après la mort,* Paris, 1922. G. Vourniquel, *Les témoins posthumes,* Paris, Leymarie, 1921. M. Maeterlinck, *Le Grand Secret,* Paris, Fasquelle, 1921. Freud, *Introduction to Psycho-analysis.* Oesterreich, *Der Occultismus im Modernen Weltbild, Sibyllen-Verlag,* Dresden, 1921. P. Heuze, *Les Morts Vivent ils?* Renaissance, Paris, 1922. F. Heslop, *Further Messages Across the Borderline,* Taylor, London, 1921. L. Farigoule, *La vision extra-rétinienne et le sens paroptique,* Nouvelle Revue, 1920. Tischer, *Monismus und Occultismus,* Mutze, Leipzig, 1921. Tassacher, *Occultismus und Spiritismus,* Stuttgart, 1921. Lewis Baylis Paton, *Spiritism and the Cult of the Dead in Antiquity,* London, Hodder & Stoughton, 1921. Evelyn Underhill,

The Life of the Spirit and the Life of the Day, London, Methuen, 1921. Walter F. Prince, *Spiritualism and the New Psychology,* American S. P. R., 1922, p. 72. J. Maxwell, *Magie,* Paris, Flammarion, 1921.

In most of these, Flammarion's fine work excepted, there is much more nebulosity than precision. Those who wish to be informed of new facts will find them in the numerous reviews that devote themselves specially to this subject.

4. *Mediums*

This term "medium," which signifies an intermediary between this world of the living and the world of the dead, is execrable, but too firmly fixed to be abandoned. In the course of this book many details will be found which have not found a place in this chapter which is necessarily abbreviated to avoid repetition elsewhere. The history of mediums covers nearly all metapsychics. There is a great difference between powerful mediums such as Home, Eusapia, Stainton Moses, and Florence Cook, who manifest surprising objective and energetic phenomena, and those who show only subjective phenomena. It is therefore necessary to place physical mediums who show telekinesis and materializations in a class by themselves.

Such mediums are very rare; even those who can give raps without contact are not common.

Their psycho-physiology does not tell us much; it is not possible to say whether they are more or less intelligent than average persons. Nothing distinguishes them from others, except their strange power of producing materializations (hands and shapes of persons), and movements of matter (noises, raps, voices, and scents) in spiritist séances.

The extreme rarity of telekinetic powers is not a matter for suspicion; we must perforce admit that all men are not alike. Some children show at a very early age astounding powers of memory and calculation. It is easy to admit that in the mass of humanity there must be exceptional individuals.

Cryptesthetic are much more common than the telekinetic faculties. Cryptesthesia of all degrees is so widespread, and telekinesis is so rare, that the persons showing the latter powers cannot be classed along with those showing the former.

We shall therefore class mediums in two distinct groups:

1. Mediums showing physical phenomena.
2. Mediums showing psychical phenomena.

Telekinesis is sharply defined; materialization still more so, but the elementary form of telekinesis, rapping, which is a sonorous vibration (without contact) in the wood of a table or a chair, without the power of raising objects or producing materializations, is not infrequent; but even here it is difficult to draw a precise line dividing those mediums who can and those who cannot produce raps, for very slight noises are often heard when a medium is scarcely touching the table, noises so slight that one can hardly be sure of them.

It would be desirable here to touch on the biography of the great mediums noted for materializations and telekinesis, but we must defer this to the chapter on materializations.

To mention Home, Florence Cook, Stainton Moses, Eusapia, Mme. d'Espérance, Eglinton, Linda Gazzera, Slade, Marthe Béraud, Miss Goligher, and Stanislawa Tomczyk is to name nearly all; it is obvious that they are but few. The number of those who give raps is very much larger, but I have no statistics regarding them.

Unfortunately physical mediums often misuse their powers; they think to enrich themselves and give public séances for profit. The Fox sisters, the Davenport brothers, Eglinton, and Slade all did this, and from thence to fraud is but a step that has often been taken, so that professional mediums of this class are always to be looked upon with suspicion and the most rigid precautions must always be taken against trickery. Indeed this is always necessary, even when there is no possible suspicion of conscious fraud.

There are, however, excellent reasons for not refusing to experiment with leading professional mediums.

1. At the outset of their careers the phenomena produced must certainly have been genuine. Leah, Margaret, and Kate Fox would not of set purpose have invented the Hydesville rappings had they not originally had genuine ones.

2. Mediums like Mme. d'Espérance, Florence Cook, Linda, Eusapia, and Marthe Béraud had never had a lesson in legerdemain or illusionism. They experienced some strange phenomena and almost in spite of themselves followed the path opened before them. Only in order to discredit the facts has extraordinary

skill been attributed to them, a skill greater than that of expert conjurers like Robert Houdin, Hamilton, and Maskelyne, sufficient to deceive the most alert men of science in a way that Houdin, Hamilton, or Maskelyne have not been able to imitate.

As to mediums producing psychical effects only, every shade between them and normal persons is observable. It would even seem that quite normal persons once in their lives may have some passing lucidity; but not to depart overmuch from usual language we will provisionally apply the term "medium" only to those persons who consider themselves to be in relations with extraneous personalities.

Conformably to this we have defined metapsychics as the science whose subject-matter is phenomena which seem to arise from an intelligence other than the human intelligence. Mediums are therefore those persons who, in partial or total unconsciousness, speak words, perform actions, and make gestures that seem not to be under control of their will and to be independent of their intelligence. Nevertheless these unconscious phenomena show intelligence and system, and are sometimes most aptly co-ordinated. Therefore the first thing to be discovered is whether they are due to a human or to a super-human intelligence.

To take a well-known and concrete example: Helen Smith writes automatically long messages that she attributes to Marie Antoinette. Is this done by Helen Smith's own intelligence, or by another? Is it Marie Antoinette or some other that governs Helen Smith's words, gestures, and writing?

We shall discuss these two hypotheses later on. For the present we shall show that there are gradual, almost indescribable gradations between these so-called mediums and normal persons. It is not only difficult, but impossible, to draw a line of demarcation; whereas between physical mediums and normal persons there is the chasm of an essential difference.

The grades of subjective mediumship may be classified as follows:

(A) The first departure from the normal consists in slight, almost imperceptible, muscular movements, sufficient, however, to enable an experienced person to recognize unconscious sensation and will in the subject under observation. There are certainly more than fifty per cent. of normal persons who reveal their thoughts by slight muscular tremors of which they are unconscious, as in the "willing game," which sometimes gives

surprising results. These involuntary movements are so frequently and clearly observable that they belong to normal physiology and not to metapsychics.

(B) The second degree consists in the creation of a new personality by hypnotism. The normal personality reappears on awaking, but under hypnotism and hypnotic suggestion a new personality appears which is evidently factitious, since the magnetizer imposes it at will and can maintain it by verbal suggestion. This artificial and transitory personality also belongs to normal official psychology.

(C) The third degree is a mediumistic state, i.e., a new personality is created by auto-suggestion. Hypnotism acts through hetero-suggestion; mediumship by auto-suggestion. There is very little difference between the personality of Marie Antoinette as assumed by Helen Smith of her own accord, and the same personality as aroused by suggestion of a hypnotizer.

Automatic writings belong to this group and there is no ground for giving this important psychological manifestation a place in metapsychics, at least in regard to the mere fact of writing, for in most of these cases the need for the hypothesis of an extraneous non-human intelligence does not arise. Since I can suggest to Alice that she is Marie Antoinette and she enacts admirably the part of the unhappy queen, why should I suppose that the Queen of France is incarnate in Helen Smith when she assumes that character of her own motion and plays it equally well? The supposition is gratuitous and infantile.

(D) The fourth step is when the new personality shows cryptesthesia and really seems to know things unknown to the medium, and even things that the secondary personality alone could be aware of, as in the case of Mrs. Piper incarnating Phinuit or George Pelham.

The "guide" of the medium (i.e., the new personality that appears) then seems to be a genuinely extraneous intelligence. These phenomena can rightly be called metapsychic because, taking them all in all, the normal intelligence of the sensitive is quite insufficient to explain the strange and potent cryptesthesia. I need scarcely remark that the notion that an extraneous force is in play is only a hypothesis.

(E) Perhaps it would be as well to reserve the name "medium" for those who produce mechanical movement without contact and materializations. This is the fifth degree; in which levitations,

telekinesis, hallucinations pertaining to the spiritist trance (akin to the hypnotic trance) and materializations appear side by side with cryptesthesia.

There is still nothing to prove that the secondary personalities may not be exclusively human and due to modalities of human intelligence; whereas the physical phenomena show something really new and metapsychic, transcending normal psychology, and by no means explicable without the intervention of unknown powers that appear to be intelligent.

As this book claims to be a working treatise, I shall, in order to give clear ideas, instance some examples of transition from the normal to the mediumistic state.

First degree. Antoinette is not hypnotizable; but if I take her hand and ask her to think of some object that she has hidden in a corner of the room, she is much astonished when I discover that object, guided by her unconscious movements.

Second degree. Alice is hypnotized. If I suggest that she is an old general, she caricatures an old general—coughs, spits, speaks roughly, swears, calls for a drink, etc. She will play this simple farce for an hour at a time.

Third degree. Helen Smith has become Marie Antoinette by auto-suggestion. She moves with dignity, speaks the language, and reproduces nearly the writing and spelling of the queen. In perfect good faith she plays this rôle for weeks or months.

Mme. Camus puts her hand on the table and feverishly writes long phrases automatically; she does not know what she writes and talks of other things while writing. A certain Vincent is supposed to be the spirit-guide of these commonplace philosophical and theosophical dissertations.

Fourth degree. Mrs. Piper gradually loses her normal consciousness; then Phinuit, or George Pelham, Myers, or R. Hodgson speak through her. But these personalities, though probably imaginary and arising from auto-suggestion, have astonishing cryptesthetic powers. The words spoken by them through the voice of Mrs. Piper, show telepathy, monitions, premonitions, and all kinds of lucidity, so that rationalism (which is itself perhaps an error), finds the greatest difficulty not to ascribe the almost superhuman intelligence displayed to some extraneous source.

Mrs. Leonard, Mme. Briffaut, Stella, and the Seeress of Prévorst are all mediums of this kind.

Fifth degree. Eusapia falls into a trance without being hyp-

notized. Then by the agency of John King, as she says, she moves objects without touching them; she materializes the hands, and sometimes the head of John King. Other phantoms sometimes appear. Home, Mme. d'Espérance, Florence Cook, Stainton Moses, Stanislawa Tomczyk, Miss Goligher, and Marthe Béraud are mediums of the same order. Frequently cryptesthesia of divers kinds appears side by side with the physical and mechanical results. The domination by an extraneous intelligence seems complete, alike by the cognition of things unknown to the medium herself and by the abnormal powers over matter.

Indeed true mediums (of the physical order) are often sensitives also; they have remarkable cryptesthetic faculties. Stainton Moses and Home showed this. Eusapia showed only mechanical and physical phenomena, Mrs. Piper only psychological.

Without drawing any inference, it must be admitted as a fact that powerful mediums attribute their powers to a "guide," whether those powers be mechanical, objective, or subjective; and in order to carry out successful experiments, it is necessary to act as though this guide were really existent and incarnated in the medium. This is a working hypothesis in the strictest sense, nearly always essential to the production of the phenomena.

Science, it has been said, is only accuracy of language. Therefore we ought not to use the same word to describe persons so different as Eusapia and Mrs. Piper. We might call those who give physical effects, mediums; those who show cryptesthetic effects which they attribute to extraneous forces, sensitives; and those who (without cryptesthesia), present, by automatic writing, secondary personalities that seem spontaneous, but are doubtless created by auto-suggestion, automatists.

This classification, like all others, is arbitrary. Sensitives are always automatists also, though the converse is not true. Hundreds of cases might be cited of automatic writing which are but moderately interesting examples of released subconsciousness, destitute of cryptesthesia and lucidity, and in no way noteworthy except for the extraordinary powers of the subconscious.

In spite of my strong desire to refer metapsychic phenomena as far as possible to the domain of normal psychology, I do not wish to curtail or misrepresent them on rationalist grounds. The dominance of a single idea and the state of automatism induced by trance, whether hypnotic or spiritist, creates such extraordinary aptitudes for cryptesthesia that one is really tempted to

believe in an extraneous intelligence in such cases as those of Mrs. Piper, Mrs. Leonard, and Mrs. Verrall. This question will not be discussed here; later on I shall treat it fearlessly.

Neither sensitives, nor automatists, nor even mediums show any special signs; they are like other people. Age, sex, and nationality do not seem to influence the matter.

Hysteria has often been invoked; but unless we assign an unwarrantable extension to this morbid state, it does not seem favourable to the phenomena. Hysterics are often hypnotizable, but so are most people. Mediums are more or less neuropaths, liable to headaches, insomnia, or dyspepsia; but this signifies very little. I entirely refuse to consider them morbid persons as P. Janet is too disposed to do. Certainly they show some dissociations of consciousness; but such analogous dissociations with partial automatism are common enough among artists, men of science, and many ordinary individuals.

J. Maxwell has insisted on a certain mark in the iris of most mediums, and it might be worth while to make some statistical research on this; but there will always be the difficulty of knowing where to stop, for there is no line of demarcation possible between sensitives and automatists on the one hand and normal persons on the other. One automatist does nothing but trace circles; another writes incoherent words; a third will write connected sentences; a fourth composes short poems; while a fifth will write a book or a novel. There are all possible degrees in automatism. The talents of the unconscious show even more variety than those of consciousness.

Cryptesthesia also admits of many gradations. A person who has been perfectly normal during the whole of a long life may one day see a veridical apparition or hear a premonitory voice. He cannot be called "a sensitive," though he has been such for a few minutes or seconds. Persons apparently normal look into the crystal and after a short time perceive dramatic scenes in the little glass sphere. One cannot say that they are sensitives, or that they are not; but here also there is no need to invoke an external agency, even to explain the fact.

Even great sensitives like Mrs. Piper or Stainton Moses have no distinguishing physiological characteristics. These privileged persons who, according to spiritualist ideas, enter into communication with the dead, do not show any other physical or mental superiority. The facility with which their consciousness suffers

dissociation indicates a certain mental instability, and their responsibility while in a state of trance is somewhat diminished; but these are only shades of character, and I infer that apart from their visions, trances, and other manifestations they are much as other people.

Their sensitiveness has usually been discovered by chance. It would be very interesting to work out the details of the origins of mediumship. Every prominent case would, no doubt, show very different points of departure, but never that they have become mediums of set purpose. The power develops spontaneously.

It is curious, and discouraging, to find that their powers do not increase. They arise spontaneously, no one knows how or why. If the fancy takes them, so to speak, they simply disappear; no effort can retain them. "Katie King" left Florence Cook and Sir William Crookes, merely stating that she must leave them. My regretted and learned friend, Dr. Ségard, told me that his young daughter of twelve showed remarkable telekinetic phenomena (levitation of a heavy table, raps, movements of objects without contact) for three days only, after which the whole power vanished. This was twenty-five years ago and the lady has never had any such later experiences. Training seems inoperative; I am even inclined to think that our efforts to regularize the phenomena bring more disadvantages than advantages. Hence in my own experiments I have entirely given up all attempts to indicate how the sensitive or the medium should act. A medium must be left to take his own way; our influence, if we have any, would probably be unsatisfactory. A powerful medium is a very delicate instrument of whose secret springs we know nothing, and clumsy handling may easily disorganize its working. It is best to allow the phenomena to develop in their own way without any attempts at guidance. It is probably a great mistake to try to educate mediumship.

Why is this? It does not seem to me that we can necessarily infer the intervention of an external intelligence. Even with normal children and youths the power of education is, perhaps fortunately, very limited.

Mediums have not hitherto been treated with justice; they have been slandered, ridiculed, and vilified. They have been treated as *animæ viles* for experiment. When their faculties faded away they have been left to die in obscurity and want; when rewarded

it has been with a niggardly hand, giving them to understand that they are only instruments. It is time that this inhuman treatment should cease.

If by any chance a powerful physical medium or sensitive were discovered, instead of leaving such a one to the curiosity of the ignorant, to journalists, and to ladies who consult them on a lost dog or a faithless lover, they should be assured of liberal board and lodging, or perhaps more, in order to prevent their mediumship being degraded by base necessities. Mme. Bisson has done this for Marthe Béraud; Lord Dunraven did the same for Home, and E. Imoda for Linda. In short, mediums should be claimed for science—severe, just, and generous science—instead of allowing their wonderful faculties to be prostituted by childish credulity or damaging contempt.

At the same time there should be no relaxation of scientific strictness, without demanding astounding experiments, or excursions into the beyond. We must resign ourselves to earth-conditions. Metapsychic phenomena should be treated as problems of pure physiology. Let us experiment with these rare, privileged, and wonderful persons and remember that they deserve to be treated with all respect, but also that they must never be trusted.

BOOK II

Subjective Metapsychics

CHAPTER I

On Subjective Metapsychics in General

1. *The Limits of Psychic and Metapsychic Science*

A primary difficulty confronts us, for as soon as we can explain any phenomena of lucidity by extreme acuteness of intelligence or by systematic treatment of the subconscious, it is clear that there is no need to refer it to metapsychics, i.e., to assume unknown faculties or the intervention of external intelligences. It will suffice to say that it is only the effect of exceptional human acuteness. We are therefore bound first to investigate the limits to human intelligence.

This is exceedingly difficult, for many intellectual phenomena occur quite apart from consciousness; and these have belonged to normal psychology since the time of Leibnitz. The mind can work without the assistance of consciousness; very complex intellectual processes take place unknown to us, and a whole world of ideas vibrates in us of which we are unconscious. Probably no remembrance of the past is completely effaced; consciously we forget much, but memory forgets nothing; the mass of past impressions is retained almost intact, though consciousness of them has vanished. For the subconsciousness wakes and works side by side with sleeping consciousness, and there can be no doubt that comparisons, associations, and judgments are formed in which the conscious self takes no part. The importance of these phenomena of the subconscious cannot be over-emphasized; but as everything that can be explained by normal psychology should be eliminated from metapsychics, and as the subconscious work of the mind pertains to normal psychology, we must lay down and always remember the law—subconsciousness is competent to do everything that consciousness can do.

Our senses give us our notions of things, and we know those things by what our senses bring us—*Nihil est in intellectu quod non prius fuerit in sensu;* but rearrangements of sensorial data may make our notions extremely complex. Thus the subcon-

scious can construct poetry, discourses, drama, and mathematics—everything that consciousness can construct. Nevertheless all this wealth is reconstructive; intelligence, whether conscious or subconscious, can never furnish more than it has been given unless we suppose some new faculty of cognition to exist. Intelligence can only work on material supplied by normal sensorial channels.

To quote a well-known simile, a mill is excellent for grinding, but can never produce anything but what it has been given to grind.

Let us suppose that Helen Smith has never heard a word of Sanscrit nor read or seen any Sanscrit book. Then if she should speak or write in Sanscrit—i.e., re-invent that language—I should consider the event miraculous, and a metapsychic phenomenon; for no human intelligence could do this.

Before drawing so extreme an inference, however, my reluctance to admit the supernormal will oblige me to make all possible suppositions. It must first be established that she has never opened a Sanscrit book, and such proof is not easy to get; for even if her good faith is assured she may have forgotten that one day in some public or private library she turned over the leaves of such a book. Besides, the Sanscrit phrase must not be a mere quotation, but have reference to present circumstances. The conditions necessary to scientific conviction of the transcendental nature of the phenomenon are so onerous that I doubt if they can often be found concurrent.

Similarly A., an unpoetical person who has never written any verse, composes poems showing delicate and original poetic faculty while in a mediumistic state. She thus writes several volumes of verse, dictating so rapidly as to make it difficult to follow. This is certainly very surprising; but before supposing that some external intelligence intervenes I shall make the simpler hypothesis that she has subconscious poetic faculty. Her verses, however good, do not transcend human intelligence.

I know that spiritualists and occultists will exclaim against this as they did against my learned friend, T. Flournoy. But their objections are not justified, for it lies on them to prove the intervention of extraneous intelligence; and this proof can be given only by establishing the absolute incapacity of subconscious intelligence to write the verse or to remember certain scraps of Sanscrit.

Laplace says somewhere, The rigour of proof must be pro-

portionate to the gravity of the conclusion. Now to admit that an extra-terrene intelligence moves the brain of Helen Smith to inspire her with Sanscrit, or the brain of A. to dictate French verse, is an inference so contrary to common-sense and logic that I shall admit any hypothesis short of mathematical or physical impossibility, rather than that of an extra-terrene mind. It is reasonable to suppose that Helen Smith has retained in an impeccable memory some phrases of Sanscrit read ten years before, and that A. may subconsciously construct verses as rapidly as a professional poet.

Every normal hypothesis must be exhausted, and also the subconscious work of the mind and the resources of an infallible memory, before we can dare to affirm the intervention of another intelligence. In the course of succeeding chapters I shall give examples of this necessary rigour.

Stella, by the movements of a table, said to me in the name of "Louise," "Give Stella the statuette that is in your drawing-room." Now I had never told Stella that I had such a statuette; but all the same, though it is extremely unlikely that I had done this, I cannot be *absolutely certain* that I had not. I would not dare to condemn a man to death on such a belief, and the evidence for a scientific conclusion should be as rigid as for a death-sentence. Moreover, some one may have told Stella of the fact, though it is unlikely, for I do not think she has ever spoken to anyone who knows my drawing-room; and, lastly, she may have used this phrase by chance. In fine, though all these hypotheses are unlikely, there is one still more unlikely—that an extraneous intelligence revealed to her the existence of the statuette in my drawing-room.[1]

The demand for rigorous evidence must, of course, not be pushed to absurdity. To resume the case of Helen Smith; if she, being a woman still young, has not frequented libraries nor ever been in the East, were to maintain a long conversation in Sanscrit instead of mangling a few incoherent Sanscrit words as she does; if she were to grasp the grammatical intricacies of this complex language; if, in other words, she knew Sanscrit

[1]It is true that when cryptesthesia has been established by great numbers of incontestable proofs it will be possible to accept as fact much that cannot be so received as yet; but this demonstration has to be made. Hence the need to eliminate pitilessly everything that is not unquestionable as a matter of demonstration. Later on it may be possible to be less exacting.

without having learned it, the hypothesis of subconscious memory would be untenable. It is certain that she has never studied Sanscrit; if, then, she were to speak it well, I do not see how, even if an unconscious and impeccable[1] memory and complex subconscious working be admitted, a complete language known and spoken could be elaborated from a few data of the subconscious memory. Such a development would be a metapsychic phenomenon.

On my asking Stella for the name of one of the women who tended my infancy, she replied, "Melanie." I was not thinking of Melanie, and I am most positively sure that this name, which disappeared out of my life fifty years ago, and which I have not thought of for those fifty years, has never been uttered by me. In this case I am obliged to infer a metapsychic phenomenon, for neither pantomnesia nor subconscious mentation working up old remembrances can account for this name emerging. I put chance on one side.

It will then be no matter for astonishment if we refuse to admit, as metapsychic, various phenomena that present a metapsychic aspect to credulous persons.[2] By the joint action of pantomnesia and the subconscious working of the mind some persons can produce poetical, fanciful, or scientific work of a complex and very wonderful nature, but which ought not to surprise us more than if they were consciously produced.

Stella in her normal state never composes poetry, but in her mediumistic state dictates, through the table, verses, sometimes of high merit, on a subject given to her and in a prescribed number of words. But I may say, without vanity, that I myself, simultaneously, by a kind of collaboration with Petrarch, who (according to the table) was speaking through Stella, was able to compose four lines on a given subject in a required number of words; and this poetry to order was neither better nor worse than that of "Petrarch." I prefer to suppose that Stella composed unconsciously what I was able to compose consciously;

[1]The word "impeccable" is unsatisfactory. I propose *pantomnesia* to indicate that no vestige of our intellectual past is entirely effaced. Probably we are all pantomnesic. In weighing metapsychic facts it should be taken for granted that we do not absolutely forget anything that has once impressed our senses.

[2]I repeat here that I keep to the definition: a metapsychic phenomenon presupposes the intervention either of an extraneous power, or of an unknown faculty of the human mind.

at any rate, that is much simpler than to suppose the intervention of Petrarch.

I shall quote, further on, the beautiful verse that Victor Hugo addressed to the shades of Molière. "Molière's" answer is very fine, too, but quite in Victor Hugo's style; but even if the style were Molière's, it is more rational to think that the medium by unconscious and skilful mimicry composed and dictated verses after Molière's manner, than to suppose the actual intervention of Molière. In a mediumistic state Victorien Sardou drew a curious and well-known design entitled The House of Mozart. Nothing could be more strange, but I shall always feel it simpler to admit that the genius of Sardou did the subconscious work than to imagine that the soul of Mozart moved Sardou's muscles.

Every case must be carefully scrutinized before it is admitted as genuinely metapsychic; but the delicate and difficult process of analyzing such cases will lead us, as I shall show hereafter, to the conclusion that there is a small number of subjective intellectual facts (much less numerous than spiritualists suppose), which neither pantomnesia nor the subconscious elaboration of remembrances can account for.

Nevertheless, even the facts inexplicable by pantomnesia do not necessarily imply the presence of an external intelligence; for yet another hypothesis is possible—that human intelligence has a greater range than that we are accustomed to attribute to it. The axiom *Nihil est in intellectu quod non prius in sensu* is itself a hypothesis. Some philosophers have added *"nisi intellectus ipse,"* and the addition is justifiable, for perhaps the intellect is much deeper than we imagine.

Moreover, we are not dealing with pure intelligence, but with sensations perceived by the intelligence. There may be other senses than the five known to us. Some animals, pigeons for instance, have a sense of direction that escapes our analysis. Why should there be no cognitive faculties other than our senses? We think that the magnet, though it acts upon iron, does not act on our nervous centres; but if it were discovered that it does, I for one should not be greatly surprised. Wireless telegraphy has shown us that messages can be transmitted through space; it is therefore possible that by an analogous but invisible mechanism to which our instruments and our senses are insensitive, the brain may be affected without our being able to perceive anything either of the transmitter or the receiver. It

is our ignorance that confines all possible knowledge of the external world to our five senses.

Accordingly, before inferring the existence of extraneous intelligence, I willingly admit, as a provisional hypothesis, that there are in us cognitive faculties as yet undetermined, neither usual nor of daily occurrence, but irregular in their appearance and mysterious in their action.

That is metapsychics, and we have to decide between two hypotheses:

1. Does an external intelligence act on ours?
2. Is our intelligence endowed with a new faculty of cognition?

Subjective phenomena alone are not sufficient for a decision between these two hypotheses; it will be necessary to examine, as we shall do later, whether the aggregate evidence pointing to extra-terrene intelligence is sufficient to prove either the hypothesis that human intelligence is endowed with faculties new to us; or, that extraneous intelligences incorporate and incarnate themselves in humanity.

From the point of view of method, it is extremely important never to lose sight of Laplace's precept; and before we enter upon metapsychics, all merely psychological possibilities must be exhausted.

We learn from psychology that pantomnesia exists, and also that the subconscious, perhaps even more than the conscious, is capable of prolonged and skilful elaboration of its materials.

In fine, in order to distinguish between the psychological and the metapsychic we shall adopt the criterion: *Everything that the human intelligence can do, even when it is most profound and penetrating, is psychological. Everything of which such intelligence is incapable belongs to metapsychics.*

If Helen Smith, without having read or heard a single word of Sanscrit, speaks it fluently and correctly, that would be metapsychic, for no human intelligence can reconstruct a language. A., thinking herself inspired by her "guide," composes verses quickly and well; this is psychological, for many persons, and perhaps A., among them, can do the same.

Stella tells me the name of an old servant of my parents fifty years ago. This is metapsychic, for she has certainly never heard me pronounce that name; and no intelligence, conscious or unconscious, could give that name without having heard it.

T. leaves his friend J. in good health. He see his friend's apparition, notes the hour, and says, "J. died at nine o'clock in the evening." This is metapsychic, for no normal psychological process could have revealed it.

Thus the work of analysis, demanding most scrupulous care, will be to examine whether the facts under consideration are explicable by known mental laws, or whether it is not necessary, as I hope to demonstrate by many instances, to suppose the existence of a special sensitiveness which I call cryptesthesia—a new faculty of cognition, called lucidity by ancient authors and telepathy by modern ones.

2. *Chance and Mathematical Probability in Metapsychic Facts*

In experiments on lucidity two cases arise: sometimes a combination having a probability = P, that appears spontaneously; or the same combination having the same probability, but arising on demand. The evidential value in these two cases is not the same, and serious errors arise if this distinction is not observed.

I ask Andrée: "What is the name of the person who wrote me this morning the letter I have in my wallet?" She answers, "It is the name of a flower—Marguerite." Now the name is not Marguerite, but Helen. I suddenly remember having received a letter which I left at home that was signed Marguerite in large letters. I was not thinking of this letter. How is the probability to be calculated?

If I had put the question having the letter from Marguerite in my wallet, the experiment would have been conclusive and the theory of probabilities would have had free play. It would have sufficed to know that there are about fifty very usual names, and the probability of a correct answer would then have been 1 : 50, about the same as for a card drawn from a pack.

But if I did not want the name Marguerite, conditions are changed. In the former case either of the two names would be correct; which reduces the probability at least to 2 : 50. But it is necessary to go much further, for if another name had been given—Louise, Madeline, or Alice—might I not claim to have received yesterday a letter from Louise, one from Madeline the day before, and one from Alice three days ago? I am therefore hardly justified in saying that the experiment has been successful on a probability of 2 : 50. An answer which is not a direct

answer to the question put is always of low evidential value. It is much as if I were to ask a candidate at an examination, What gas combines with hydrogen to form water? and he were to answer, Chlorine combines with sodium to form sodium chloride. Although perfectly correct, I should not be satisfied with the reply.

The mathematical theory of probability does not apply unless the conditions can be most accurately stated, for the least experimental defect will very greatly change the figures obtained. On the other hand, if the experiment is unexceptionable (which, by the way, is very seldom the case) the mathematical theory of probability can be rigorously applied.

Let us suppose an experiment unexceptionable, and let us see what ratio allows us to exclude chance as an explanation.

Men of science do not allow for chances in quantitative analysis. A chemist who is seeking the atomic weight of silver gets 108.42; he will not imagine that chance had anything to do with that result. He will, however, repeat the experiment, and if he gets 108.34 he will still not accept the idea of chance, but will take the mean, 108.38, as the atomic weight of silver.

It is not immediately obvious why metapsychics should not be permitted to draw a conclusion from two experiments, since this is done in astronomy, chemistry, and physiology. Nevertheless, it is easy to understand why, in metapsychics, the possibility of chance always enters in, for no experiment can be repeated with conditions so similar that a mean can be struck as in chemistry or physiology.

If after finding 108.42 as the atomic weight of silver, the chemist were to get 22.87 on the following day, he might feel the former result due to chance; but as a matter of fact his second and third experiments will give results very near the first, so that none of a possible three—108.42, 108.34, and 108.35—can be put down to chance; they corroborate one another.

After Andrée had given me the answer "Marguerite," I inquired for another name on the following day; she gave a wrong answer. Again on the next day, a similar failure. I must, then, take these failures into account, and I might, strictly speaking, put down the correct result to chance, while in the chemical experiment chance can have no place.

It is a terrible defect in metapsychic experiments that they can never be repeated with certainty. One is never sure that

today's successes can be repeated tomorrow. A particular medium may have given a series of good results on lucidity, and a few days later before a scientific committee every attempt to repeat a single one of these experiments may be a lamentable failure.

This does not imply that we must give up experiment nor that we cannot use the mathematical theory of probability. We must begin experiment afresh. We need not imitate Don Quixote, who, having made his helmet, tested it by a heavy blow with his sword and broke it. He made another, but forebore to test it, lest it also should give way, and contented himself with it as it was.

When a successful experiment has been made, we should not fear to repeat it, whether the result be to confirm or to invalidate it; on the contrary, we should apply some fresh test.

As the number of successful experiments mounts up, the greater their value becomes. To take this instance of the names; it has been shown that the probability might be taken as 1 : 50, but were actually 2 : 50. Let us admit, for the reasons given above, that it might be 5 : 50 or 1 : 10. These odds against chance success are considerable, but not sufficient for a reliable conclusion; but if on ten successive days I obtain successful results, each having the probability of 1 : 10, this amounts to odds probability of $(\frac{1}{10})^{10}$, which is moral certainty.

However, though we never get an uninterrupted series of successes, we can still use the calculus of probabilities, blending successes and failures by the classical formula for compounded probabilities:

$$\frac{S!}{\alpha!\,\beta!}\,\alpha^{p}\,\beta^{q}$$

where S is the number of trials in which there have been α successes on probability p, and β failures on probability q. Of course $S=\alpha+\beta$.

The sign ! indicates successive multiplication of $1\times2\times3\times\ldots\times S$.

E.g., from an urn containing six balls, five black and one white, twelve drawings are taken, the ball drawn being replaced after each trial, $p=\frac{1}{6}$ for the white ball, and $q=\frac{5}{6}$ for the black.

Let us suppose that in twelve trials we get five white and seven

black, that is, $\alpha=5$, and $\beta=7$. The probability of five white on twelve trials will be

$$\frac{1\times2\times3\times4\times5\times6\times7\times8\times9\times10\times11\times12}{(1\times2\times3\times4\times5)\ (1\times2\times3\times4\times5\times6\times7)}\times(5)^{\frac{1}{6}}\times(7)^{\frac{5}{6}}=\text{about}\frac{1}{40}$$

The calculus of probabilities gives very interesting results, but it must be used with extreme caution, for the smallest experimental error vitiates the whole result.

Mere good sense, apart from all arithmetic, can lead us to conclusions. If the word *Kerveguen* is given by spelling over the letters of the alphabet, that being really the correct word, it is useless to work out the probabilities that chance has had no part in the matter, for the odds against the result being by chance is $(\frac{1}{25})^9$. Cryptesthesia in this case is a moral certainty.

It should not be objected that there is no *absolute* certainty, since even with a probability of $(\frac{1}{25})^{100}$ the mathematical certainty would not be absolute. In fact the moral certainty is much the same with $(\frac{1}{25})^9$ or $(\frac{1}{25})^{100}$, and would still be much the same with $(\frac{1}{25})^3$ for no one has had a chance success with any single experiment when the real probability was only $\frac{1}{15,000}$.

It is much more important to exact the utmost scientific rigour in the experiment itself.

To show how fallacious the calculation of probabilities may be when the experiment is defective, I may instance the case of the Misses Creery who presented a long series of results in mental transmission whose probability was only $\frac{1}{100,000,000,000,000}$.

A few zeros more or less matter but little; what is important is that the experiments should be faultless. Now, the Creery girls admitted in the end that their answers were sometimes tricky, so that the figures proved nothing whatever.

Even without any intentional trickery there may be some error in the experiments, very slight perhaps, but enough to vitiate all calculations of probability. In dealing cards, for instance, the subconscious attention of the percipient, which is always awake, may very well note certain minute points, unperceived by most people, that would enable him to recognize some particular cards. And who can say when the experimenter has seen a card and called for it to be guessed, whether his facial expression may not, in despite of himself, give a sharp-sighted medium some clue which can consciously or unconsciously be made use of?

At roulette all the niches are exactly equal, but if there is one a little larger than others, even the tenth of a millimeter, this imperceptible difference makes the calculus of probabilities inapplicable. On 360 trials, for instance, the number that is a little wider than others will come up twenty times instead of sixteen, as it should.

The calculus of probabilities should be applied only when the experiments are unexceptionable.

There is another reason for caution; some facts do not admit of calculation. Mrs. Green sees two young girls drowning, their hats floating on the water. At that moment two girls, one of them a niece that Mrs. Green had never seen, were drowned in Australia and their hats were seen floating on the water some hours after. The improbability could not possibly be put into figures.

When Stella is asked the first name of G.'s son, and answers "Jean," the probability may be considered comparatively easy to calculate. Is it? Am I to take all possible masculine names? There are about two hundred, about one hundred that are common, and perhaps thirty very common. According to the data chosen the probability will be 1 : 200, or 1 : 100 or 1 : 30. Moreover, I must presume that there was not the slightest gesture of a stop at the letter J by the person running over the alphabet.

In fine, we may use the calculus of probabilities; but with caution, for it facilitates over-bold statements.

Further, it is a curious fact that calculation of probabilities seldom produces definite conviction; by a kind of half-justified instinct people refuse to admit inferences that are not evident at first sight.

3. *Concerning Errors of Observation*

The calculus of probabilities is very easy of application, and any schoolboy could solve the elementary problems in arithmetic that arise from its application to metapsychic matters; but the experimental precautions and the alert and sustained attention that go to an unexceptionable experiment are as complex as the actual calculation is simple.

I will here endeavour to give some cautions, for rigorous experimental conditions are of the very first importance. To avoid illusions is the crux of subjective metapsychics.

1. Mistakes of memory. Memory, whether one's own or that of others, is unreliable. In observing subjective phenomena very few persons will deliberately falsify; but very many give distorted accounts of what they have seen and heard; they modify and alter phrases, details, dates, and hours, and change words, all quite involuntarily. We are all liable to this; and in such matter I trust no one, not even myself. When firmly convinced of the hypothesis of lucidity, a witness will relate some telling fact, passing lightly over contradictory details and omitting awkward ones, while insisting overmuch on those that support his theory. One little word is passed over in silence, another is added, and these may fundamentally change the conclusion to be drawn.

By repeated telling, a story becomes quite unconsciously distorted and gives rise to inferences that are wonderful indeed, but fallacious.

No accounts can be relied on unless written down immediately after the event to which they refer. If after several repetitions we compare the verbal account with that written down at the time, it will often be found that the cumulative effect of successive mental changes has made the story very different from the record. We should constantly remind ourselves that memory is very treacherous. No observer soever can dispense with writing down all the details of an experiment immediately it is finished.

And full details are never put down; it is important to describe the smallest circumstances; notes must never be scanty. In contrast to published work, notes should be prolix to the point of being wearisome. A profusion of detail in notes written for one's own use is never a mistake. Everything should be noted, one always tends to be too concise. It is well that when several persons have taken part in an experiment that all should write records. During my experiments with Eusapia in conjunction with Ochorowicz I dictated notes throughout the experiments, to a secretary placed in a corner of the room, so that all the circumstances of every phenomenon should be described without alterations of any kind. It is to be regretted that this cannot always be done.

For these reasons records made long after the event or dealing with ancient observations never written down at all, can never have any but a very qualified value.

The best evidence is the conclusion of a good observer on the facts, drawn at the time. The opinion formed during the ex-

periment while all subsidiary facts exercised their influence on his mind will carry much more weight than any account given ten or twenty years after. During the continuance of an experiment a rapid synthesis is made of all the surrounding conditions so that we reach a personal conviction, more intuitive than definitely reasoned out indeed, but very valid. Many details may escape our memory, but the remembrance of the conviction produced remains.

For my own part I give great weight to the conviction so produced (which should be written down immediately after the experiment in the notes taken), for we find ourselves led (often wrongly) by defective memory to modify first impressions either in the direction of credulity or of scepticism, both of which are equally regrettable.

To conclude: much error is due to scanty records and to lapses of memory.

2. In the course of an experiment attention must be paid to all the circumstances, even to those which seem irrelevant. In dealing with subjective metapsychics, every word, every gesture should be well considered. The slightest play of feature, a sigh or a smile, an interjection, a slight movement of the hand, any sign, however unnoticeable, of satisfaction, impatience, surprise, or disappointment may possibly put the medium on the track and no slightest indications of the kind should be made.

All this is very difficult, and long practice is needed to reach absolute impassiveness. I am inclined to think that the reason why telepathic experiments seem to succeed more often than those of simple lucidity is, that as in the former the answer is known beforehand, the medium is helped by involuntary trifles, while in the latter case no such assistance can be given. One does not correct one's own trifling mistakes and signs of dissatisfaction. Unfortunately it seldom happens, when we know the word that ought to be given, that we are so self-controlled; we are often so unskilful as to allow it to be seen whether the answer begins well or ill.

Especially with table experiments extreme precaution is required. Of course, the movements of the table are usually due to the medium only, but if any other hands are upon it the assistants may mechanically affect its jerks or levitations. The slightest pressure is enough to reveal the thoughts of those who have their hands on the table; and it must be repeated that

mediums, whether consciously or unconsciously, have their attention on the stretch; they are on the look-out for anything that may reveal the word, the phrase, or the idea that is sought for. Nothing escapes them, and the slightest pressure on the table becomes a sign that they know how to interpret. This perspicacity has nothing to do with fraud, for their interpretations, deductions, observations, and conclusions are all subconscious; but the effect in falsifying results is the same as if there were conscious fraud.

Therefore, in order to make any serious experiment on lucidity, it is inadmissible that any person who knows the answer to be given should touch the movable object through which that answer is to come. I have often been surprised by the astounding credulity of some persons who exclaim at the wonderful answers given through the table. Oh, yes, no doubt the answers were correct but no way astonishing, since the questioner himself furnished them! Many experiments in subjective metapsychics are thus vitiated for want of the precautions necessary to deprive the medium of all help from the face, the gestures, and the words of the person who knows the answer.

Exquisite tact is needed if we are not to be misled by appearances. Good experiments in subjective metapsychics are very difficult indeed; they can only be made by distrusting everything and everybody, one's self included. A desire that the experiment should be successful must never lead us to deceive ourselves.

3. Fraud is as rare in subjective phenomena as it is common in the objective; for I take it for granted that no one will experiment with persons known to be tricksters. In most cases the good faith of medium and assistants is above reproach.

But belief in the good faith of the operators should in no way reduce the precautions to be taken. The experimenter should act as if the medium were persistently fraudulent; for if conscious good faith is the rule, unconscious bad faith is the rule also; every medium makes desperate efforts by an unwearied subconscious mind to find the answer required and uses all possible means to discover it.

For instance, I ask for the name of Marguerite's brother. Now it is possible that the medium has at some time or other heard that Marguerite has a brother who is one of my friends. Then her brain will work to find out who among my friends (whose first names she, perhaps, knows)—Henry, Louis, Charles, Gus-

tave, Paul, Lucien, Gaston, Robert—may be Marguerite's brother. By means of some details subconsciously retained she knows that Louis, Henry, and Charles have no sister. Five names only then remain, and then if during the interrogation through the table all the letters of the alphabet are passed over up to R without a word or a sign, only the name *Robert* will remain; she will say "Robert"; and if I am not exacting I shall find this reply very satisfactory.

Therefore, that lucidity may be really established there must be an absolute impossibility, I say *"Absolute,"* of the utmost perspicacity putting the medium on the track.

Only at this price can observations be taken as conclusive. When we are dealing with objective metapsychics the dispositions to be made to guard against possible bad faith will be equally severe, but obviously of a different kind.

CHAPTER II

On Cryptesthesia (Lucidity) in General

1. *Definition and Classification*

Nearly the whole of subjective metapsychics can be reduced to a single phenomenon which the magnetizers of a past age called "lucidity" or "clairvoyance" (*hellsehen*); which is now called telepathy, with various shades of meaning attached to the term. I propose to name it cryptesthesia. Myers has already used the term "telesthesia."

The Greek etymology of the word signifies "a hidden sensibility"—a perception of things by a mechanism unknown to us of which we are cognizant only by its effects.

I shall endeavour to prove that human intelligence includes a special and mysterious faculty which reveals certain facts, past, present, or future, that the senses are unable to supply.

That Stella is able to state the name of an old servant Melanie which she has never seen or heard, indicates (unless this be by chance) that some vibration has reached her intelligence and revealed this name to her. Therefore she possesses some cryptic sensibility which acquaints her with what her normal senses could not have told her. We do not know how or by what means this happens, and shall endeavour to discover the method; but even though we do not succeed, the bare fact is unquestionably real. There is cryptesthesia.

The major part of this book is devoted to proving the existence of this faculty; but before proceeding to the many and diverse facts which constitute the history of cryptesthesia, two essential points must be examined:

1. The relation of cryptesthesia to lucidity and telepathy.
2. The psychic phenomena that take the form of metapsychic phenomena and might pass for such if superficially and imperfectly analyzed.

2. *Connection of Cryptesthesia with Lucidity and Telepathy*

Mesmer, Puységur, and Du Potet verified a power that enabled the subjects of their experiments to see objects in a closed box, to read in closed books, to travel to and describe places unknown to them, and to guess the thoughts of the magnetizer and his assistants.

Later on, Myers invented the happy term "telepathy," which has been extensively adopted to signify that human thought can act upon another person without any apparent external vibration.

But synergetic vibrations in two brains is a hypothesis that must be examined somewhat closely, for many ideas on telepathy are current which I believe to be erroneous.

People readily imagine that to refer a fact to telepathy is to explain it. The magic of words leads them to think of telepathy as a simple thing.

When, as previously mentioned, Andrée tells me, "You have received a letter signed by a woman who is named after a flower, Marguerite," it is always suggested that I was thinking of Marguerite and that Andrée has read my thought.

Two hypotheses then present themselves, setting aside chance and mal-observation; either that Andrée said "Marguerite" because the name was in my thoughts or that by a special faculty of lucidity she has read the name on the letter in my room a mile and a half distant.

From the scientific point of view it is equally impossible to understand how this name could be known, whether by the unconscious remembrance in my brain of a letter received that morning or by the fact of its being written at the foot of that letter.

The problem is equally mysterious whether I have or have not read the letter. Although the pole-star is many millions of miles beyond Sirius, both are equally inaccessible. To read my thought seems as difficult as to read a letter (open or closed) on my desk two miles or two thousand miles distant.

It seems to me slightly less difficult to admit reading a signature at a distance than to admit reading a word in my brain; for, as we are dealing with the inexplicable, it is slightly easier to imagine that piercing vision should traverse the intervening distance and penetrate walls and papers than that the percipient should be able to interpret the verbal sense carried by the modes

of vibration of cerebral cells in my skull. Both being hypotheses, I prefer to imagine an amazing retinal vision of written words than a reading of my brain wherein nothing is written, but in which there are so many impressions, memories, and exceedingly complex and evanescent combinations that are really ultra-microscopic modifications of cellular protoplasm, none of which have any relation, apart from my own consciousness, to the sound or to the phonetic signs of the name. To say "telepathy" explains nothing. Cerebral vibration, conscious or unconscious, is a profound mystery, much greater than a signature, which is positive, real, and tangible, and would be visible to sight if sufficiently penetrating; whereas the reading of a thought cannot be explained by any intensification of any of our senses.

There are many reasons, none very sound, why the telepathic hypothesis should be so favourably received by unscientific (or even by scientific) persons as if it were so simple that there should be no need to press it further.

1. The first is that it agrees perfectly with the shortcomings in experiment. It is obvious that if I do not know the word "Marguerite" in an unopened letter I can in no way assist Andrée to say the word. But if I do know it and am not very careful, if Andrée hesitates, seeks, and guesses, I may very naïvely furnish indications that she will not fail to use. I may be putting her straight and becoming an unconscious accomplice. There will not be the absolute inertia that must prevail if I do not know the word. Having made very many experiments, I know only too well how difficult it is to give no sign whatever of approval or disapproval when one knows the word the medium has to discover.

2. An equally bad reason is that spectacular exhibitions of so-called thought-reading are given to the public. The skill shown at these exhibitions is sometimes marvellous. A young woman, A., with bandaged eyes, is seated facing the audience. Her magnetizer, B., stands at her side, and calls for one of the audience, C., who is certainly not an accomplice. C. shows his visiting card without speaking; B. looks at it, and almost immediately A. spells out the card, sometimes with hesitation, sometimes very quickly, without delay or mistake, even when the words are unusual.

The experiment is an amusing one, but proves nothing except the extraordinary skill of the operators. It is practically certain

that there is a code of signs, words, attitudes, movements of the right or left hand or foot, of the body or the head that allow A., whose eyes are more or less completely bandaged, to perceive signs that the public do not notice, and enable her, thanks to an excellent memory, to state the numbers or words that B. transmits. It is no more thought-reading than when a Morse telegraph operator gets the sense of a message from the ticking of the instrument.

Generally these exhibitions are so quick and so skilful as to satisfy a public that loves to be deceived; people leave with an unreasoned conviction that they have seen "thought-reading," and thenceforward when they have uttered the words "thought-reading," "mental suggestion," or "telepathy," they fancy that they have understood the whole thing and do not imagine that they are speaking of one of the most terrifying mysteries of human existence.

3. Another form of pseudo-thought-reading is also spectacular. An individual, A., sensitive, or claiming to be sensitive, but certainly very sharp, declares he will read the thought of anyone who will hold him by the hand. He brings on the scene B., taken from the audience. The unfortunate B., shy at his position, hesitates, takes A.'s hand, and A. makes him walk by his side quickly or slowly, and by skilful guesses reaches the place that B. thought of. He stops before some member of the audience, searches in his pocket, and, still holding B.'s hand, withdraws a handkerchief which he takes to some other point in the hall. All this to the amazement of the audience and especially of B., who has willed the whole performance, and imagines that A. has read his thought. In fact A. has merely interpreted skilfully the unconscious and involuntary muscular movements of poor B., who does not know that he has by such movements given very clear indications; and the public leave the hall more than ever convinced of telepathy. In this way belief in telepathy as an obvious and simple fact becomes firmly fixed in the popular mind; though in all this there is no more telepathy than in the contraction of a frog's muscle by the electric battery.[1]

It is doubtless for such reasons that telepathy is accepted more

[1]There is a whole bibliography on unconscious movements. I cannot give even a résumé of it here. It is the *willing game*, otherwise called Cumberlandism, from Cumberland, who first gave these exhibitions. Grasset explains it by his "polygon," which is simply an ingenious diagram of the subconscious.

readily than lucidity. The two are, however, not opposed; both are probably true and real telepathy should be considered as a particular and common mode of lucidity. It may be remarked that nearly, if not quite always, when a percipient is asked a question the answer is known to the questioner. When it is unknown it is almost certainly known to someone else, and the telepathic theory might be pushed so far as to say, "If the percipient has read 'Marguerite' in a letter that B. has not opened, she could certainly not read in B.'s mind a word it did not contain; but there is another person—Marguerite herself—whose thought has been read, and not the word written in the letter."

Some go even further. As there are facts known to no living person, but known to B., now dead, this can still be explained by telepathy—the thought of B., deceased, has been transmitted to the percipient.

These wire-drawn explanations show amply that we know absolutely nothing of the means whereby cryptesthetic cognitions reach the mind.

The question whether there is telepathy (transmission of human thought) or lucidity (cognizance of an external fact) is specially applicable to the very frequent cases of monitions at the moment of death.

I will take an instance that might have been invented for illustration, though it is real. A. sees in his sleep on a certain night the apparition of his friend B., pale as a corpse. A. writes down the name in his diary, adding "God forbid." At that very moment B. was killed while out hunting on the other side of the world.

Again the same two hypotheses arise: Did A. perceive an external event, or did the dying thought of B. traverse the intervening space and impress A.?

I do not venture to decide between these hypotheses, both of which seem to me equally mysterious, but I infer a faculty of cognition outside the order of normal faculties. I think it best to keep within the limits of rigid science, and to say—At certain times the mind can take cognizance of realities which neither our senses, our insight, nor our reasoning permit of our knowing. This is not an explanation, but it leaves the door open to any future explanation. Human thought is one among the realities thus made known, but this is not a necessary condition; the reality alone is sufficient, without its having passed through a human mind.

Let us go no further, and in presence of these unusual facts let us be content to say that our mental mechanism, even more complex than it seems, has means of cognizance that escape analysis and are even beyond surmise. This dispenses with all hypothesis; it does not imply that cryptesthetic knowledge arises from transmitted vibrations of human thought; it merely states a fact, and it is more scientific to enunciate a fact without comment than to enmesh one's self in theories, such as telepathy, which are entirely unproven.

"Telepathy" implies a hypothesis; "cryptesthesia" has the great merit that it does not. If A. sees his dying friend at the moment of death it is a hypothesis to say that the thought of B. has been transmitted to A. But it is no hypothesis to say that A. has some special sensibility that makes him aware of the death of B. Telepathy is not contradictory of cryptesthesia. As "thought-transference" it comes into play in certain cases, but is quite insufficient in others. In such obscure matters superfluous hypotheses should be avoided as far as possible.

As there are few, if any, facts known to no human person soever, all phenomena of lucidity, with scarcely any exceptions, might be referred to telepathy. Theoretically, distance, whether two yards or two thousand miles, does not come into the question. But it is vastly improbable that when Mrs. Green, in London, sees a niece whom she does not know, drowning in Australia, the thoughts of that niece should have sought out her aunt. Is it not much simpler to admit, without making any hypothesis, that Mrs. Green possesses a special sensitiveness?

Therefore, when in this book telepathy is spoken of, as it often will be, it must be understood as a particular form of lucidity and not as a distinct phenomenon. Both are equally mysterious.[1]

3. *Phenomena of Normal Psychology Having Only the Semblance of Cryptesthesia*

The necessity of not introducing facts explicable by normal psychology into metapsychics has already been insisted upon.

It is noteworthy that in nearly all experiments mediums refer the thoughts transmitted through a table, by planchette, or by

[1]I have just received the April (1921) number of the Proc. S. P. R., containing an excellent article by Mrs. H. Sidgwick (pp. 242-398), *An Examination of Book-tests.* She reaches a similar conclusion. I regret that I cannot here analyze this valuable notice.

writing, to personalities other than themselves. This is the case even when they have but a very slight acquaintance with spiritualist literature, or even at the commencement of their mediumship none at all. It has seemed advisable to me, as to all who have conducted such experiments, to admit their suppositions in order to facilitate success. This does not imply a belief in the reality of such notions; it is only a working hypothesis, as Claude Bernard said.

"Personification" characterizes nearly all spiritist experiments. I borrow this word from J. Maxwell, who uses it to describe the tendency of mediums to attribute their answers to separate personalities. These are often multiple, but there is usually one that takes precedence, and excludes others. This personality in spiritualist parlance is called a "guide" or "control." The remarkable object phenomena presented by Eusapia were referred by her to John King. Similarly Mrs. Piper's subjective phenomena were attributed by her to Phinuit. These personifications are sufficiently explained by the unconscious, which, like an unknown guest, has emotions, ideas, remembrances, will, and feelings quite beyond our consciousness. A study of the psychology that deals with duplication of personality will show how far this subconscious personality is real or imaginary.

Physicians have observed that in some rare cases the whole mentality of the patient A. is changed. He takes another name, B., loses remembrance of his former life, and builds up a new set of associations in B.'s name. A. and B. then seem to be two separate persons, with differing tastes, feelings, and acts. Since the well-known case of Azam, Dr. Prince has collected some remarkable instances in America.

Magnetizers have declared, vaguely, that they could, by verbal suggestion, transform a patient in this manner while in the hypnotic state; but they seem never to have realized the bearings of this experiment, and everything about it was doubtful. I made a study of these alternations of personality in 1887, and since then they have taken rank among the admitted phenomena of hypnotism.

This singular fact may be thus described: I tell Alice, a young girl in the hypnotic state, "You are no longer Alice, you are an old woman." It matters little whether or not I have made any passes, verbal suggestion is sufficient. At once Alice takes on the cough, the gestures, and the weak voice of an old woman, and

for an hour or two, if the patience of the observers is not wearied, she acts in all respects like an old woman. It is acting, but involuntary acting proceeding from a docile mind under hypnotic suggestion. Nothing can be more extraordinary and indeed amusing than this complete adaptation to the new personality.

The question of simulation does not arise. It is universally recognized that there is no simulation; and it matters little to know whether there is or is not any faint remembrance at the base of her consciousness that she is Alice. What is obvious and certain is that she assumes the character assigned to her without the ability to throw it off. That there remains some residue of her real personality is more than possible, it must be so; but her personality instantly adapts itself to the suggested personality with a vigour and perfection not to be rivalled by the most accomplished actress. The conformity to the new personality is so complete that even the handwriting changes its character.

Any character can be imposed at will; she becomes a general, a little boy, a pastry cook, a fine lady, or a market-woman, and we get whatever comedy we may desire.

The experiment may be pushed still further. Some subjects will take on animal similitudes. I hypnotize my excellent friend H. Ferrari and tell him that he is a parrot. I ask him, "Why do you look preoccupied?" and he replies, "How can I eat the seed in my cage?" The words "my cage" are typical and indicate the extent of the transformation.

I wish to make it clear that there is no reason for surprise if spiritist messages seem to come from a real person. The human mind is very prone to create a personality. The phenomenon is the same whether it proceeds from external suggestion, from some exterior event, or from auto-suggestion. It is not metapsychic, but pertains to normal psychology; and when subconscious actions take place they group themselves round the personality that has been created.

I compare this to crystallization from a saturated solution—the crystals form round a centre. Similarly remembrances and emotions concentrate upon the personality invented.

These spiritoid personalities manifest themselves chiefly in automatic writing or table movements, and (more rarely) by raps. Sometimes they borrow the voice of the medium. The conviction is so thorough, the representation so perfect, and the unconsciousness so complete that the experimenters are won

over and cannot suppose that all these psychological phenomena proceed from an imaginary being.

A woman takes a pencil and writes pages upon pages without knowing or understanding what she writes in feverish haste; her handwriting is quite different from the normal; she writes and writes for ten minutes, for half an hour, or even longer. When one sheet is finished she takes another and instantly covers it. All this while she knows nothing of what she is doing, and she can at the same time keep up a quite sensible conversation with those round her. Everything happens just as if her own personality were replaced by another that borrows her hand.

In all good faith she says, "It is not I who write," and in all good faith those who see her agree that it is so. If only the writing should be similar from day to day, moderately coherent in style and ideas, if the imitation of the manner of some deceased person is fairly good, all are convinced that a spirit has intervened and made his wishes known.

But it is no more possible to admit this than when I say to Alice, "You are now an old general"; and she speaks like an old soldier. Whether there are or are not any traces of the normal personality remaining, in no case at all can the reality of an external personality be admitted.[1]

This is as true of mediums as of somnambulists, only in the latter it is produced by external suggestion, and in the former it is entirely due to auto-suggestion. But in both cases the new personality is arbitrary and factitious, and has no more external reality than poetic creations—than Esmeralda, Carmen, Figaro, or Don Juan.[2]

I will now give some examples of these automatic writings if only to show the high improbability that they proceed from spirits.

[1]The best instance of these alterations of personality is perhaps that of Helen Smith becoming Marie Antoinette, of which Flournoy made a profound study.

[2]Mme. Noggerath, a kindly woman who lived to a great age and died some years since, held many séances with different mediums, and devoted her whole life to propagation of spiritualist doctrines which she most profoundly believed. She published in a book, *La Survie, sa réalité, sa manifestation, sa philosophie. Echos de l'Au-delà*, Paris, Flammarion, 1897, the messages claiming to be from the spirits of the dead. Pythagoras, Socrates, Buddha, Fénelon, Bossuet, Molière, Abélard, Moses, St. John, Robespierre, Cuvier, Diderot, all appear. This list should by itself be enough to show the nullity of this belief.

You neglect me, and forget me in the petty cares of your world. You keep me waiting when I beg for a family reunion. You make a vacuum for me, as it were; I cannot enter on an unknown void.

—MOLIÈRE.

O Venice, of whom so many poets have sung. Venice, flower-like, what remains of her glory and her gorgeous palaces? The glory of Venice is no more; the vices of her proud rulers have killed her. Where are now the sublime teachings of Jesus? All has vanished. The cross has cast a deadly shadow, deadly because phantoms intercepted its rays.

—PYTHAGORAS.

Life on earth (*la vie planétaire*) enables the resolutions taken in the wandering state—that is, in sidereal life—to be reduced to practice. In the latter state, there being no bodily needs to force the spirit into action, life can only be contemplative.

—J. J. ROUSSEAU.

What melancholy times! What sad days! How veiled is my soul! How have I fallen so low? Why can I not forget? Why do rays of light fall on me, followed by utter darkness?—the vague remembrance of a past that I feel to be cruel, but cannot re-awaken! Oh, the cries of terror, the flowing, steaming blood!

—FOUQUIER-TINVILLE.

No doubt the words about steaming blood aroused the memory of Mlle. de Sombreuil in the medium's mind, for immediately after Fouquier-Tinville Mlle. de Sombreuil comes on the scene and says some astounding things:

I love Fouquier-Tinville. I loved him from the moment he saved my life. I recognized his beauty and his own kind of greatness. Yes, I love him! I suffer when people praise my virtue and call him whom I love a monster; O Love, Love!

—MLLE. DE SOMBREUIL.

Let us put aside these divagations; they would only be matter for laughter if it were not for the melancholy fact that they have been accepted as genuine by honourable men. In fact they are but manifestations of the subconsciousness of the mediums, which is often below mediocrity.

There are exceptions to this poverty of language in spiritist communications. M. Carmelo Samona having asked a spirit why nothing of the beyond was divulged, received by raps the following really fine symbolism: Non mangerai pane il cui seme non abbia dormito prima nello nuda terra, la cui bionda spiga non si sia curvata al soffio del vento, e non sia caduta poi sotti l'inexorabile falca del mietitore (*Psiche misteriosa,* Palermo, 1910, p. 64).

In a few minutes, Laura speaking to Petrarch through Stella, who in her normal state is not poetic, says:

Si j'étais l'air que tu respires,
Ami, comme je serais doux!
J'éffeuillerais sur ton sourire,
Des baisers exquisément fous!

Among the most remarkable exceptions are the verses dictated to Victor Hugo, who believed in spiritualism.[1]

Jules Bois gives, in *Le Mirage Moderne* (Paris, Ollendorff, 1907) some interesting details on Victor Hugo's spiritualism. He was converted by Mme. Emile de Girardin in Jersey, September 6, 1853. At the first séance Vacquerie asked, What word am I thinking of? The table answered, You mean "suffering." The word in Vacquerie's mind was "Love." The answer was ingenious and unexpected. In later séances Victor Hugo was not at the table: Charles Hugo was the medium. He knew no English. An Englishman came in and called Lord Byron, who replied in English:

Vex not the bard, his lyre is broken,
His last song sung, his last word spoken.

Strange apocalyptic answers are attributed to Ezekiel, and—to the lion of Androcles! On the margin of the MS. Victor Hugo writes the stupefying words, "The volumes dictated to my son Charles by the table contain an answer from the lion of Androcles."

Each verse given is good in itself, but the development of the poem is incoherent: "Æschylus" expresses himself thus:

Non, l'homme ne sera jamais libre sur terre:
C'est le triste captif du bien, du mal, du beau,
Il ne peut devenir—c'est la loi du mystère—
Libre qu'en devenant prisonnier du tombeau.

Fatalité, lion dont l'âme est dévorée,
J'ai voulu te dompter d'un bras cyclopéen,
J'ai voulu sur mon dos porter ta peau tigrée,
Il me plaisait qu'on dît: "Eschyle néméen."

[1] "The moving or speaking table has been much ridiculed. Let us speak out. This ridicule is pointless. It is easier to mock than to examine, but it is not scientific. . . . Science knows very little and has no right to dream. A scientist who ridicules possibilities is near to being a fool. The unexpected should always be looked for in science."—(*Shakespeare* by Victor Hugo, Lacroix, Paris, 1864.)

Je n'ai pas réussi: la bête fauve humaine
Déchire encor nos chairs de son ongle éternel.
Le cœur de l'homme est plein encor de cris de haine,
Cette fosse aux lions n'a pas de Daniel.

Après moi vint Shakspeare, il vit les trois sorcières,
O Némée, arriver du fond de la forêt,
Et jeter dans nos cœurs ses troublantes chaudières,
Les philtres monstrueux de l'immense secret.

Il vint dans ce grand bois, la limite du monde;
Après moi, le dompteur, il vint, lui, le chasseur.
Et, comme il regardait dans son âme profonde,
Macbeth cria: "Fuyons," et Hamlet dit: "J'ai peur."

Il se sauva. Moilère, alors sur la lisière,
Parut, et dit: "Voyez si mon âme faiblit.
Commandeur, viens souper." Mais au festin de Pierre
Molière trembla tant que Don Juan pâlit.

Mais que ce soit le spectre, ou la sorcière, ou l'ombre,
C'est toujours toi, lion, et ta griffe de fer.
Tu remplis tellement la grande forêt sombre,
Que Dante te rencontre en entrant dans l'enfer.

Tu n'es dompté qu'à l'heure où la mort, belluaire,
T'arrache de la dent l'âme humaine en lambeau,
Te prend, dans la forêt profonde et séculaire,
Et te montre du doigt ta cage, le tombeau.

Sometimes Victor Hugo interrogated the spirits, of course in admirable poetry. One day he addressed Molière:

Les rois, et vous, là-haut, changez-vous d'enveloppe?
Louis quatorze au ciel n'est-il pas ton valet?
François premier est-il le fou de Triboulet?
Et Crésus, le laquais d'Esope?

But Molière did not reply: the answer came from the Shadow of the Tomb.

Le Ciel ne punit pas par de telles grimaces,
Et ne travestit pas en fou François premier,
L'enfer n'est pas un bal de grotesques paillasses,
Dont le noir châtiment serait le costumier.

Dissatisfied with the response, Hugo repeats his invocation to Molière:

Toi qui du vieux Shakspeare as ramassé le ceste,
Toi qui près d'Othello sculptas le sombre Alceste,
Astre qui resplendis sur un double horizon,
Poète au Louvre, archange au ciel, ô grand Molière!
Ta visite splendide honore ma maison.

Me tendras-tu là haut ta main hospitalière?
Que la fosse pour moi s'ouvre dans le gazon.
Je vois sans peur la tombe aux ombres éternelles;
Car je sais que le corps y trouve une prison,
Mais que l'âme y trouve des ailes.

The Shadow of the Tomb (probably annoyed), answers:

Esprit qui veux savoir le secret des ténèbres,
Et qui, tenant en main le céleste flambeau,
Viens, furtif, à tâtons, dans nos ombres funèbres,
Crocheter l'immense tombeau!

Rentre dans ton silence, et souffle tes chandelles,
Rentre dans cette nuit dont quelquefois tu sors,
L'œil humain ne voit pas les choses éternelles,
Par dessus l'épaule des morts.

Fine verses, but not due to Molière or to Æschylus, any more than to the lion of Androcles.

In the first séances given by Helen Smith, Victor Hugo is supposed to be the inspiring influence; and as interpreted by Helen Smith, his poetic faculty has strangely gone off:

L'amour, divine essence, insondale mystère,
Ne le repousse point. C'est le ciel sur la terre.
L'amour, la charité seront ta vie entière;
Jouis et fais jouir; mais n'en sois jamais fière.

(FLOURNOY, *loc. cit.*)

The lion of Androcles was a better poet than Helen Smith's Victor Hugo.

The Shadow of the Tomb spoke in prose as finely as in verse. As Victor Hugo complained of the use of symbolical expressions, the Shadow replied:

"O ill-advised! You say the Shadow of the Tomb speaks in human language, and uses biblical figures and words, metaphors, and falsehood to express truth. The Shadow of the Tomb is not a mask, I am a reality. If I condescend to speak your jargon in which the sublime is so tempestuous, it is because you are limited. Words are a fetter to the spirit; symbols are the casket of thought; your ideals are restraints on the soul; the sublime to you is a low blind-alley; your sky is the roof of a cave; your language is a noise bound up between the covers of a dictionary. My language is immensity, the ocean, the tempest. My library is of thousands of stars and millions of planets and constellations. If you desire that I should speak to you in my own tongue, ascend Mount Sinai, you will hear me in its lightnings; go to Calvary, you will see me in its rays; descend into the tomb, you will hear me in its mercy."

If, as seems probable, the subconscious of Charles Hugo dictated both prose and verse, that subconsciousness emulated the genius of Victor Hugo himself.

There are other interesting cases in which it is just as necessary to suppose purely human intervention.

Hermance Dufaux, a girl of fourteen, has given a *Life of Jeanne D'Arc,* dictated by Jeanne, and *Confessions of Louis XI.*[1] Allan Kardec guarantees the honesty of this young girl in her claim to have written these books by inspiration without reference to historical records and documents.

Four hypotheses are possible:

1. Gross fraud, getting the needful particulars from public libraries, or from easily procurable books; just as Prosper Mérimée was able to write *Le Théâtre de Clara Gazul,* without any spiritist implication. This seems likely; though it implies a cleverness, skill, and dishonesty of which this respectable girl was perhaps incapable (?).

2. An infallible memory, partially subconscious, so that Hermance could recall at the moment required everything that she had read and heard. Her subconscious intelligence, more able than her normal mind, classifies, condenses, and verifies all the detail she has read and heard, and attributes these to Jeanne and to Louis XI. What could we not say and write if we could thus recover *all* the details of *all* our reading! Even at fourteen years old a great deal might have been read!

Hermance Dufaux, speaking as Jeanne d'Arc, resembles Helen Smith who sincerely thinks herself Marie Antoinette or Cagliostro. I think this hypothesis almost as likely as the first, although a third might possibly be taken.

3. By cryptesthesia, Hermance, being a sensitive, knows facts, names, dates, and events that have not come to her through her normal senses. Then these metapsychic cognitions group themselves around the personality created by auto-suggestion.

Before admitting this bold hypothesis in such a case, it would be necessary to know the exact limits of Hermance's reading; which after an interval of half a century, is impossible.

4. The last hypothesis is that the consciousnesses of Louis XI and Jeanne have not disappeared from the world and write through Hermance.

[1] *Revue Spirite,* 1858, p. 73, and *La Vérité,* May 29, 1864 (1 vol., E. Dentu, Paris, 1858).

Here we have a terribly incredible hypothesis that cannot even be considered unless the radical impossibility of the three former hypotheses has been demonstrated.

I have dealt fully with the case of Hermance Dufaux because it applies equally to all the cases of automatic writing which are presumed to identify dead persons.

Bersot (cited by Grasset, *ad loc.*, 195) states that there was printed at Guadaloupe in 1853, *Juanita,* a novel, by a chair, followed by a proverb and some other ineptitudes from the same source.

The story of Charles Dickens dictating the conclusion of his novel, *The Mystery of Edwin Drood,* after his decease, is still more astonishing.[1]

In 1872 a young working shoemaker named James, who had received but little school education, found himself able to write automatically. In this way Dickens, not long dead, expressed the desire to complete the work left unfinished at his decease. James set to work, i.e., to write under the dictation of Dickens. The result is this volume, that some critics consider quite worthy of Dickens. On this I am not competent to speak, nor to appreciate the similarities in style, the use of the London dialect in place of the American idiom, and the knowledge of the topography of London; but it is well known that parodies are easy enough, e.g., "*à la Manière de* ——" by Müller and P. Reboux. Even if the parody were more perfect I should not infer the intervention of Dickens. Even if James's good faith were established and the incapacity of normal intelligence to create this able parody were also proved, I should still not infer the survival of Dickens. Any supposition seems to me preferable to the naïve and simple but terribly improbable hypothesis that Charles Dickens returned from the other world to move the brachial muscles of James.

The Martian language invented by the ingenious mind of Helen Smith shows how much the subconscious is capable of. No one can suppose that the idiom is real, i.e., that the inhabitants of Mars, if they exist, speak a language queerly derived from the French. Flournoy has shown in his incomparable book the mental mechanism that goes to the creation of a new language. Helen Smith's Martian language leads us to suppose that the

[1]*The Mystery of Edwin Drood,* 1873. (Clark Bryan, Springfield, Mass., *U. S. A., The Spiritualist,* 1873, 322.)

Sanscrit she spoke is derived from the same subconscious source.[1]

Nevertheless the problem presented by Helen Smith's Sanscrit is less simple than that of her Martian language, for Sanscrit is a real tongue, and moreover unusually difficult. Now Sanscrit books are not common, and Helen had none such at her disposal; she did not frequent public libraries, but what she said was Sanscrit—a rudimentary, defective, and ungrammatical Sanscrit, but still Sanscrit.[2]

M. de Saussure, addressing the innumerable readers to whom Sanscrit is unknown, and wishing to put them in a position to appreciate the kind of Sanscrit Helen wrote, drew out a Latin parallel as follows: Meate domina mea sorore forinda indi deo indesingodio deo primo nomine obera mina loca suave tibi offisio et ogurio et olo romano sua dinata perano die nono colo desimo ridere pevere nove.

It is barbarous and incomprehensible Latin, with here and there some single Latin words.

However, and this is very strange, there being no letter f in Sanscrit, there is none in Helen's writing. It is true that there is no *u* either, but *ou,* and Helen has written *ou* though she pronounced it as *u.*

This problem of Helen Smith's Sanscrit is a delicate one and should not be lightly treated. I am inclined to admit, not the incarnation of an Indian prince, but a certain cryptesthesia which allowed of the use of some scraps of Sanscrit. This is the mature opinion of Myers, with which I concur under reservations.

Many other books have been automatically written. But it would need a sickly and almost criminal credulity to think that Thermotis, the daughter of an Egyptian king, had dictated the work entitled *Pharaon Menephtah.*[3]

[1]Another attempt at a Martian language and a Martian novel, both very poor, was made by Mrs. Smead, studied by J. Hyslop. Not much is inferable from them. J. Hyslop, *The Mediumship of Mrs. Smead, A. S. P.,* 1906, vi, 461-502.

[2]In his *Nouvelles Observations* (pp. 212-213) Flournoy says that the person in whose house Helen gave séances had a Sanscrit grammar in the room where the séances were given. But how could Helen have found opportunity in the course of her séance to study this grammar unknown to those present so as to acquire the elements of the language? Could she have taken this book home secretly, perhaps even unconsciously?

[3]*Pharaon Menephtah,* 2 vols., Paris, Edit. Ghio, and in the Libr. des sciences psycholog. Also *Episode de la vie de Tibère,* by the same author (L'abbaye des Bénédictins, 2 vols.).

The spirit, "Rochester," who is supposed to have dictated, conjointly with Thermotis, these strange pages, which proceed from a mental automatism as human as it is mediocre in quality, was, it appears, once upon a time a certain Caius Lucilius. Such fantasies are not worth comment.

There is a whole literature of this kind: for instance the *Letters from a Living Dead Man,* by X. (London and New York, 1914). X. was an American magistrate (probably David P. Hatch of Los Angeles, California), versed in philosophy. Mr. X. also published the *War Letters from a Living Dead Man* (Rider, London, 1918), by the automatist Elsa Barker. These show the same vague and well-meaning idealism as most other writings of the kind. There is nothing, absolutely nothing, to show the presence of any intelligence other than that of the automatist. Quite recently a book (the second of a series), entirely automatically written has appeared in New York; but though full of high ideals, it contains no indication of anything beyond what any cultivated mind could attain without difficulty.[1]

The characteristics of the literature of the unconscious are distinctive enough to be recognized without difficulty. There is in the first place a marked tendency to vague and mystical phrases on the destiny of the soul and its imperishable powers. These divagations of the subconscious are always markedly religious, as if their purpose were to lay down the lines for the rites and doctrines of a new religion. They are pervaded by a love for humanity which would be touching if it were not expressed as a rhetorical and cloudy philanthropy. Automatic writings abhor precision, and shun precise indications, favouring very ordinary commonplaces. They would seem to be the work of poets ignorant of prosody, of philosophers who know no philosophy, of priests ignorant of theology; all of whom make laudable efforts to give us counsel on philosophy and precepts on religion in poetic and nebulous language.

With the rarest exceptions and despite some comical puerilities, these emanations from the subconscious are, as Myers points out, marked by undeniable morality and tend to develop all that is best in human nature.

An interesting little book on automatic writing has appeared,

[1] *"To a woman from Meslom," a message from Meslom in the life beyond, received automatically by Mary McEvilly* (New York, Brentano, 1920). See also *A Record of Psychic Experiments.*

by Mrs. Hester Travers-Smith, who tells the story of her own mediumship. She worked sometimes by writing, sometimes with a planchette. She had four guides—Peter, Eyen, Astor, and Shamar. The results do not lead to any very clear inferences whether as to pragmatic cryptesthesia (psychometry) or to premonitions; but there are some useful rules on the conduct of séances for writing automatically or with the planchette.

There is automatic drawing as well as automatic writing, which sometimes gives interesting results. Helen Smith has made some curious spirit-drawings.[1]

She had a hallucinatory vision and reproduced it in form and colour. As she took very long to complete these drawings, sometimes only adding a few strokes of the brush in a day, their execution took more than a year. They were ultimately completed, however, and every time she was prompted to paint, the vision reappeared. Other designs have been reproduced by M. Claparède.[2]

Commandant Le Goarant de Tromelin has often sent me strange spiritist designs made by himself in a semi-somnambulic state. Every letter is composed of human or animal forms in juxtaposition.

A lady known to Dr. Geley has shown him sheets of automatic drawings representing abstract qualities—anger, gluttony, avarice, etc.—by clever caricatures.

I have recently seen a number of drawings by Mme. Blocus when in the mediumistic state. She is in no way a professional medium, though her mother has long been able to write automatically. Her drawings, which are sometimes very charming, are mostly ornamental designs, and are very rapidly produced.

Jules Bois has cited very many cases of mediumistic drawing; such as that by Victorien Sardou, inspired by Bernard de Palissy, entitled, "The House of Mozart." (Sardou had written a play under that title, which had been refused.) He drew another, called, "The House of Zoroaster," in the same style. Fernand Desmoulin and Hugo d'Alesi, both talented painters in their normal state, have produced curious pictures and some remarkable designs subconsciously.

The mechanism of automatic drawing is the same as for auto-

[1]A. Lemaitre, *Une étude psychologique sur les tableaux médianimiques de Mlle. H. Smith.* (Arch. de Psychologie, Geneva, July, 1907.)

[2]*Bull. de la Soc. Méd. de Genève,* June 3, 1918. *A. S. P.,* 1909, xix, 147.

matic writing. The hand draws and paints instead of writing. The impulse is irresistible, involuntary, and independent not only of the will but also of the consciousness of the medium. Outlines are drawn the meaning of which is not understood by any one, neither by the medium himself nor by other persons, but such outlines are curiously connected with others analogous to them, which, standing alone, appear devoid of significance, but taken together acquire a very definite meaning. Sometimes persons who have no artistic ability produce strange and complicated designs, which are always of a symbolic nature. Such phenomena are proper to somnambulism; it is difficult to see in them any metapsychic influence.

Spiritualist literature abounds in productions of this kind, but only credulity can see in them anything more than the lucubrations of the subconscious. Nearly all are characterized by vaguely Oriental symbolism that is sometimes not without a strange beauty.[1]

All these writings and paintings might have been done by human faculty. Nowhere do we find the *quid divinum* that would lead us to refer them to some intelligence above the ordinary human level. Therefore, as we desire to exclude from metapsychics everything of which human psychism is capable, we shall not take them into account here, but none the less they constitute an extremely curious chapter in normal psychology which should be carefully studied by psychologists.

4. *Classification of the Modes of Cryptesthesia*

These phenomena are so numerous, varied, and mysterious that some classification must be attempted to reduce this chaos to some sort of order.

Such groupings are necessary for study and for teaching, but there should be no illusion as to their value: they do not give any adequate interpretation of these complex phenomena. Real facts can never be classified in our arbitrary schemes with the precision we are apt to assign to them.

In the first place we shall discriminate between experimental cryptesthesia deliberately excited, and accidental cryptesthesia oc-

[1]See the mediumistic designs by Machner (*A. S. P.*, 1908, xv, 86) and by Petit Jean (*A. S. P.*, 1911, xxi, 360).

curring unexpectedly. This latter might be called spontaneous, but this term would not be quite accurate, for accidental cryptesthesia is induced by some exterior cause.

It is very possible that there is no essential difference between the two kinds; but the mode of studying them must be different, for they do not arise in the same way.

Experimental cryptesthesia can be more easily examined, in principle at any rate, because it is voluntarily aroused, whereas the accidental type occurs suddenly, without the intervention of an experimenter, by chance, and without intention, in normal persons either asleep, awake, or half awake, who are themselves surprised by the occurrence.

The division shows that metapsychic science is both experimental and observational. To neglect either method would be to maim the science disastrously.

Experimental cryptesthesia can be studied:

A. In normal subjects,

B. In hypnotized subjects,

C. In mediums,

D. In sensitives.

Hence come four distinct modes, even though the division between them is not very well defined: for on the one hand mediums go into trances strongly resembling the hypnotic state, and it may sometimes even be necessary to hypnotize them in order to bring out their mediumship; and on the other hand it is impossible to tell how near persons that we think normal may be to mediumship or to hypnotic states.

There is, however, this difference, that in most cases, if not in all, mediums speak, write, or move the table or the planchette as if under the influence of an extraneous personality; whereas hypnotized subjects invoke no guide. But this distinction is more apparent than real, for without doubt the past training of sensitives, mediums, and hypnotized subjects has played a preponderant part in the maintenance or the suppression of their normal personality.

Sensitives are apparently normal persons, who, without being mediums or somnambulists, seem capable of lucidity and clairvoyance under certain conditions, not accidental but experimental, such as crystal vision psychometry, etc.

Accidental cryptesthesia is that which supervenes suddenly in

quite normal persons who are neither in the mediumistic nor the hypnotic state.

All accidental cryptesthesia may be called "monition."

Monitions are the revelation of some past or present event by other than the normal senses. Premonitions relate to an event in the future.

As monitions are numerous and varied, we shall distinguish between those referring to trivial events and serious ones, the latter including all monitions of death. These latter indeed represent a group of fairly homogeneous facts that it would be inconvenient to separate.

Collective monitions will be dealt with in a chapter by themselves; for they are intermediate between the subjective and the objective phenomena of metapsychics, and therefore deserve special consideration.

Finally, we must assign the phenomena of the divining-rod to cryptesthesia, and perhaps also some curious manifestations of arithmetical intelligence apparent in certain animals.[1]

[1]If it should be thought that I am too severe on theories I will answer by quoting Claude Bernard, the acknowledged master in experimental sciences:

"In science faith is an error, scepticism is a progress. All the systems . . . that have been created in the embryonic stages of any science are doomed to oblivion and vanish away as transitory methods, as the science takes shape. Progress, therefore, does not consist in reviving past systems, but in forgetting them and replacing them by a knowledge of the law of the phenomena" (Lessons in experimental pathology, 1872, p. 399).

CHAPTER III

Experimental Cryptesthesia

1. *Cryptesthesia in Normal Individuals*

Many experiments have been made on normal persons, though not as many as are required.

These give widely differing results according to the person under experiment. Nevertheless if lucidity exists in certain exceptional persons, as has been proved, it is probable that some traces of it will be found in others. It is highly improbable that along with those who are frequently lucid there should not be others who have some share in this faculty, however slight it may be.

It is therefore necessary to investigate whether some trace of lucidity may be discoverable in normal persons. This trace of cryptesthesia may be determined by the answer to the question, When an individual indicates at random a fact, a number, or a form whose probability is determinable, is the ratio of probability changed by the occurrence of cryptesthesia?

Long since I suggested this method of investigation, and made numerous experiments of the kind, which have been repeated and confirmed by my learned colleagues of the S. P. R.[1]

These experiments on insensitive or barely sensitive persons were made with playing-cards, drawings, and photographs. I have sometimes made use of the divining-rod, showing unconscious muscular movements for these experiments. In all cases the exact probability could be determined.

It was always found that the number of successes was slightly in excess of the probable number. For instance; on 2,103 guesses of playing-cards there were 552 successes as against a probable 525. But for a sound inference it is well to eliminate those that have been so many (say over 100) on any given day, as to produce fatigue and confusion. Reckoning experiments not

[1]C. Richet, *La suggestion mentale et le calcul des probabilités* (*Revue philosophique,* 1884, xviii, 609-671); *Phantasms of the Living,* i, 31-70.

exceeding 100 on any day, there were 315 successes against a probable 280, the number of guesses being 1,132. This is still inconclusive.

By experiments made in England by the same method with 17,653 guesses there were 4,760 successes, exceeding the probable number by 347. This is more distinctive, but still not very convincing. It seems possible, however, to distinguish persons possessed of more or less lucidity by this means.

My friends G. F. and H. F. were certainly slightly sensitive. Working with the divining-rod when the odds were 1 : 8, 1 : 6, and 1 : 48, we had the results stated below on five trials:

	1 : 8	*1 : 6*	*1 : 48*
1st trial.....	Success.	Failure.	Failure.
2d trial.....	Success.	Failure.	Failure.
3d trial.....	Success.	Success.	Success.
4th trial.....	Success.	Failure.	Failure.
5th trial.....	Success.	Success.	Success.

Thus, the probability being 1 to 8, there were 5 successes on 5 trials. The probability of five consecutive successes is only 1 in 32,000. Cryptesthesia in this case is a moral certainty.

On the other hand, A. P. and myself, who neither of us have any lucidity, operating side by side with G. F. and H. F., obtained:

1. Success, failure, failure.
2. Failure, failure, failure.
3. Failure, failure, failure.
4. Failure, failure, failure.

Showing no appreciable difference between the probable number and that actually obtained, quite different from the results by G. F. and H. F.

A later series of trials made simultaneously by B., by S., and by myself with cards *seen by no one,* B. had 5 failures, I had 1 success, and S., who has mediumistic powers, had 2 successes. The compounded probability on two successes (each having the simple probability of 1 : 52) is 1 : 250.

We cannot enter into all the details given in Sir William Barrett's report (Proc. S. P. R., *Experimental Telepathy, Phantasms of the Living,* i, 20-29; i, 47-65); but the importance of Sir Oliver Lodge's experiment with young girls who were neither

hypnotized nor mediums demands mention.[1] Mr. Malcolm Guthrie made the arrangements for the experiment, which was on the reproduction of drawings. In one instance the drawing to be guessed was the Union Jack, which was reproduced without hesitation.

The conditions were perfect; and twenty years later Sir Oliver writes: "I declare positively that the experiment was entirely conclusive, and I have had no subsequent doubt of its validity."

218 trials were made by six persons, the probability being 1 : 6. In 54 guesses Mrs. H. and Mrs. B., both of whom had some vague mediumistic power, had 22 successes, the probable number being 10 on chance alone. The four other persons in 162 trials had 45 successes against a probable 32; the ratio of the actual number to the probable one being 220 for Mrs. H. and Mrs. B., and 140 for the other four persons.

In an experiment made by Mr. Herdmann, a Cambridge professor, the results were:

Actual drawing.	*As guessed.*
Red.	Red.
Yellow.	Golden color.
R.	R.
E.	E.
Right-angled triangle.	Isosceles triangle.
Tetrahedron.	Pyramids of Egypt.
Five of clubs.	Five of spades.

Such experiments are very cogent. So likewise are those given by Ochorowicz in his excellent book on Mental Suggestion, which all should read who desire to take note of the many precautions that should be taken to eliminate causes of error.

At Brighton in 1882, with G. A. Smith as percipient, Ed. Gurney and Myers obtained very remarkable results which the strange subsequent denials of Mr. Smith do not invalidate (*Proc. S. P. R.*, viii, 536).[2]

[1] O. Lodge, *Nature*, xxx, 145, and *The Survival of Man*, French translation, 1912, p. 26.

[2] Quoted by Delanne, *loc. cit.*, p. 268.

Name thought of.	*First answer.*	*Second answer.*
Barnard.	Harland.	Barnard.
Bellairs.	Hamphreys.	Ben Nevis.
Johnson.	Jobson.	Johnson.
Regent Street.	Rembrandt Street.	Regent Street.
Hobhouse.	Hanter.	Regent Street.
Black.	Drack.	Blacke.
Queen Anne.	Quechy.	Queen.
Wissenschaft.	Wissie.	Wisenaft.

More recently Sir Oliver Lodge, experimenting with the Misses de Lyro, found that they had a curious joint sensitiveness. They held each other's hands. The detail is given in *The Survival of Man,* pp. 44-45, and strictly speaking something not quite amounting to cryptesthesia might be admitted, not fraud, but a transmission by contact, a transposition of sensibility—a phenomenon very much akin to cryptesthesia. And "the guesses changed from 'frequently correct' to 'quite wild,' directly the knuckles or finger-tips or any part of the skin of the two hands ceased to touch. It was almost like the breaking of an electric circuit" (p. 45).

It is to be noted that the answers were given very quickly, even for somewhat complicated figures. The number thought of, "3,145," was given very rapidly as 3,146. The number being 715, the answer was "714; no, 715." Nevertheless, and notwithstanding the authority of Lodge, I think these very interesting experiments fundamentally different from those in which there is no contact.

In some good experiments by F. L. Usher and Burt, with themselves as percipients (they not being sensitives in the ordinary acceptation of the word), they verified that the guessing of a card was more nearly correct than chance would account for even when the operators were very far apart—London to Bristol (120 miles), and London to Prague (960 miles). On 60 trials the results were:

	Actual number.	*Probable number.*
Complete successes	4	1.1
Value of the card	14	4.5
Colour of the card	28	30

At a smaller distance, in the same room, but full precautions

being taken that no indication could be given by the agent, there were, on 36 trials:

	Actual number.	*Probable number.*
Complete successes	9	0.7
Value of the card	15	2.7
Colour of the card	20	18

The totals are very satisfactory, for in 96 trials the number of successes was 13 against a probable number of only 2; while for the value of the card chosen the successes were 29 when chance alone would have indicated 7.[1]

The fact that in the case of the colour of the card the actual successes and the probable successes were both 48 shows that the experiments were very well conducted. Other experiments have been made with drawings; some of these are interesting but do not lend themselves to a calculation by probabilities. We shall return to these when speaking of clairvoyance by sensitives.

An important paper on lucidity was presented at Königsberg in 1913 as an inaugural address by Max. Hoppe (*Ueber Hellsehen,* Berlin, Haussmann, 1916). His analysis of cases of lucidity as applied to guessing of cards and numbers is methodical and detailed. He establishes that even when operating with sensitive subjects, the proof is not rigorously exact, which I readily grant; but it must also be admitted that definite proof of cryptesthesia is not to be reached by this kind of experiment. Mediums and somnambulists dislike these tests which do not move their sensitive faculties like an automobile accident or a fire. Nevertheless his criticism is acute. He criticizes my own experiments on Léonie with justice; I had, however, no need to wait for this criticism to admit their very moderate value. Nor does he admit the lucidity of Mr. Reese. On this point, however, his objections seem to me valueless. He made experiments with one single person with negative results, but that proves nothing whatever. In short Mr. Hoppe confines himself to criticism (quite legitimate criticism) of my old experiments in 1884. I think he would find it difficult to maintain his position in view of my later experiments and those of the large number of men of science who have made a study of lucidity.

[1] *Quelques expériences de transmission de la pensée a grande distance* (*A. S. P.*, 1910, xx, 14-21 and 40-54).

Dr. Blair Thaw of New York, experimenting with Miss Thaw, has obtained very clear cases of cryptesthesia applied to colours, the telepathic mental suggestion being very evident (Hyslop, *Science and a Future Life,* pp. 25-30).

Colour thought of.	*First answer.*	*Second answer.*
Light red.	Light red.	Light red.
Green.	Green.	Light red.
Yellow.	Blue.	Yellow.
Light yellow.	Light yellow.	Yellow.
Dark red.	Blue.	Dark red.
Dark blue.	Orange.	Dark blue.
Orange.	Green.	Heliotrope.

The Misses Wingfield, who certainly have remarkable mediumistic powers, made a series of 400 experiments which would be equivalent to demonstration if there be no defect in the method—a point on which I am not able to judge.

In 400 trials the probable number of successes is 4; the number obtained by thought-reading was 27. In 21 cases the digits were reversed. The odds against both results are very large, and the number of successes amounts to a moral certainty that a cause other than chance was in play (*Ph. of the L.,* ii, 653, 669). But were the experiments unexceptionable?

Miss Lindsay and Mr. Shilton also had a number of successes far higher than the probable number (*A. S. P.,* 1909, xix, 123).[1]

But however interesting the mathematical evaluation of probability in such experiments, it must always be remembered that the value to be attached to the figures depends entirely on the absence of defect in the methods pursued. Absolute experimental rigour is the essential condition.

One subject experimented on by Lombroso had his eyes and ears completely sealed and words were written behind his back

[1]The bibliography is a very large one. I specially cite J. Ochorowicz, *La suggestion mentale,* Paris, 1884. Ch. Richet, *La suggestion mentale et le calcul des probabilités, Rev. Philosophique,* December, 1884. Fr. Myers, *On a telepathic explanation of some so-called spiritualistic phenomena* (*P. S. P. R.,* 1883-1884, 217). *Automatic writing, ibid.,* 1885, p. 1, May, 1887, 209; June, 1889, 222. Other curious cases are noted in the second edition of *Phantasms of the Living,* ii, 670-671. The experiments by the Misses Creery reported in the *Phantasms of the Living,* i, 25, must not be taken into account, for fraud was proved (*Note relating to some of the published experiments in thought transference, P. S. P. R.,* 1884, 269-270).

for him to read. The first word was Margharita; he wrote Maria and then Margharita. Amore was written; he wrote Moirier, then Amore. Andrea was written; he wrote Andrea.

Dr. J. Ch. Roux, while a student, made some unexceptionable experiments with a pack of 32 cards, definitely evidential of cryptesthesia. He had 5 complete successes, the compounded probability being 1 : 3000.

In another series of 81 trials he had 54 successes, as against 20 if due to chance alone. There were also 8 successes when chance would have given 1 only (*A. S. P.*, iii, 1893, 295).

A schoolmaster whose name is not given made an experiment with a class, not with cards, but with six letters. In 7 experiments of 30 trials each with several scholars at the same time, the probable number was $\frac{5940}{6}$, say 990; the number of vowels indicated by the percipients was 1050, slightly, but only slightly, in excess of the chances. However, in all 7 experiments there was some excess.

Probable result.	*Actual result.*
180	196
170	180
150	154
140	149
40	44
175	179
135	148

The probability of excess over the single probabilities being ½, it follows that the probability that there would be an excess of ½ in 7 trials is, say 1 : 128.

If instead of taking the whole of the 39 trials, we take only the first 12, the result is much higher.

Probable result.	*Actual result.*
108	129
102	109
90	105
84	86
24	32
105	110
81	90

being 661 against a probable 594.

An experiment in telepathy with cards on a little girl of thirteen by Oliver Lodge gave some interesting results. We will quote only those in which the father of the child did not see the card (Report on a case of telepathy; *J. S. P. R.*, May, 1913, 103).

Card drawn.	*Card named.*
Five of diamonds.	Five of clubs.
Four of hearts.	Two of hearts.
Four of hearts.	Three of hearts.
Four of hearts.	Four of hearts.
Ace of hearts.	Ace of hearts.
King of diamonds.	An eight.
King of diamonds.	A king.
King of diamonds.	King of clubs.
King of diamonds.	King of hearts.
Ten of diamonds.	Ten of diamonds.
Ace of diamonds.	Two of clubs.
Three of diamonds.	Four of spades.
Three of spades.	Two of hearts.
Three of spades.	Four of spades.
Three of spades.	Two of spades.
Three of spades.	Two of hearts.
Knave of clubs.	Picture card.
Knave of clubs.	Knave of clubs.
Ten of clubs.	Picture card.
Ten of clubs.	A six.
Ten of clubs.	Nine of clubs.
Ten of hearts.	An eight.
Ten of hearts.	Picture card.
Ten of hearts.	A seven.
Ten of hearts.	Heart.
Ten of hearts.	Ten of hearts.

It is very instructive that the child succeeded well when the card had been seen by Lodge, and failed when he had not seen it; so that Lodge is inclined to think (without expressly saying so), that the case was one of telepathy and not of lucidity, in other words, that the cryptesthesia was the result of mental transmission.

The experiments of Mr. Henry Rawson with drawings are quite conclusive and would involve absolute certainty of telepathic cryptesthesia if there were no defect in the experiment,

as to which I am unable to express an opinion, as in the case of Miss Wingfield. In the first experiments Mr. Rawson only was in the room with the percipient, Mrs. L. and the agent, Mrs. B. Mrs. L. and Mrs. B. are sisters. Their backs were turned to one another and it was absolutely impossible for Mrs. B. to see the drawing made by Mrs. L. (Myers, *Human Personality,* i, 614).

Analogous facts were observed by Mr. Kirk. He had remarkable success, though the percipient was very far distant, as much as 360 miles (Myers, *ibid.,* p. 620). There were some very striking successes under these conditions; especially in one case a hand drawn by Mr. Kirk was reproduced by Miss G. (p. 621); in another a little dog. Later on Mr. Kirk, having tried to magnetize Miss G., unknown to her, and at a distance, seems to have failed.

Myers quotes from Mr. A. Glardon experiments in thought-transmission at great distances, from Tour de Peilz in Switzerland to Ajaccio in Corsica, or Florence, between Mr. Glardon and a friend of his, Mrs. M. The results were sometimes very good; there were failures, but the successes were such as to carry conviction of real cryptesthesia.

We shall see in the sequel that cross-correspondences, analogous to these experiments, have also given good, though perhaps less decisive, results.

M. Max Dessoir, who is profoundly experienced in hypnotic phenomena, endeavoured to ascertain what guessing at drawings would do in his own case. The results were barely greater than would be due to chance (*Phantasms of the Living,* ii, 642).

Similar experiments, mentioned above, had been previously made by Mr. Guthrie of Liverpool, with Miss Relph and Miss Edwards, in October, 1883 (*Phantasms of the Living,* i, 38). About 150 trials were made, the successes being sometimes very complete; three of these are given in the figure to enable the reader to judge. The percipient had her eyes bandaged, and the drawing, instead of being placed in an opaque envelope, was steadfastly gazed at by the agent.

Mr. J. Edgar Coover has written a voluminous account of the results of many experiments made by him with playing-cards, which are not entirely negative whatever he may say; they seem to indicate that average persons have some degree of cryptesthesia (lucidity) though extremely slight. In 5,135 experi-

ments in telepathy the numbers indicated by probability were 513 and 128 (complete success); the actual numbers obtained being 538 and 153 (complete success). This is painfully small, but it is something.

In 4,865 experiments on lucidity the probable numbers were 486 and 122 (complete success), the actual numbers obtained being 488 and 141; which again is a very slight excess on the probability.

It is as well to note that some persons are better endowed with the faculty than others. Choosing fourteen persons who seem to have some degree of lucidity their results were 119 and 54 on 711 experiments, the probable numbers being 71 and 18.

The excess over probability is considerable, but some reserves must be made in regard to this plan of choosing only the best of the experiments.[1]

We cannot follow out the very lengthy details given by Mr. Coover. In spite of all his efforts his own results actually prove a slight, though very slight, degree of something more than chance in guesses at a card drawn, whether it be due to telepathy or to lucidity.

Pickmann, who gave public séances in thought-reading, probably by muscular indications from the person whose hand he held, possibly had some degree of cryptesthesia. He seems to have given a very successful exhibition of mental suggestion to Lombroso.[2]

He came to visit me one day, and I tried an experiment that seems unexceptionable. While Pickmann was in another room I spread an entire pack of 52 cards on the table. I chose one of these cards at random, looking at it closely but without touching it, and endeavouring to visualize it. I then fetched Pickmann from the next room, and placing him with his back to the cards asked him to name the card I had thought of. He succeeded at the first trial, 1 : 52, which pleased us both. But three further trials failed.

I will also mention, *passim*, another experiment, though it stands alone and chance may have had something to do with it.

[1]*Experiments in Psychical Research*, Stanford University (Calif). Analysé in P. S. P. R. par F. G. S. Schiller; November, 1916, xxx, 261-273.

[2]Cited by Delanne (*Gaz. litt.*, Turin, 1892), but being unable to refer to the original, I cannot say exactly under what conditions the experiment may have been made.

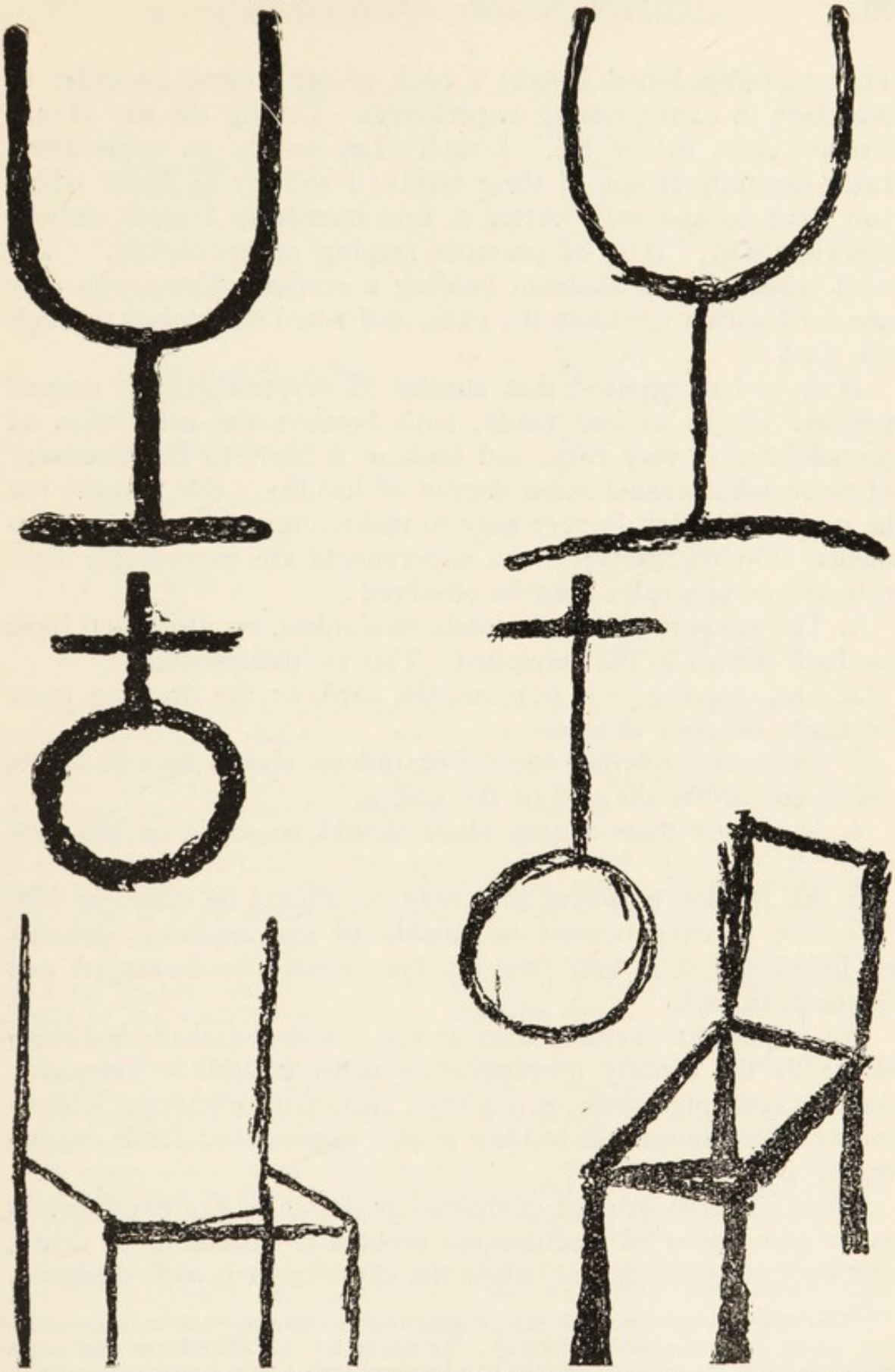


FIG. 1.—Three experiments by Mr. Guthrie and Miss Edwards. The drawings on the right are the reproductions of Mr. Guthrie's original designs on the left. Miss Edwards's eyes were bandaged, but she was too far away to see anything even had this not been done.

That morning I had bought a pack of tarot cards in order to use them in card-guessing experiments. During the day Henry Ferrari came to see me. I said, "Let us try an experiment. Look carefully at one of these tarots; I will try to divine which you have looked at." After a few moments, I said, without knowing why, "It is of peasants reaping or harvesting." The card represented a skeleton holding a scythe. There was only one card with a scythe in the pack, and I had not looked through the pack.

It is to be regretted that studies of cryptesthesia in normal persons are so seldom made, both because the calculation of probabilities is very easy, and because it leads to the discovery of those who possess some degree of lucidity. But it must not be supposed that it is very easy to make unexceptionable experiments. On the contrary, the experiments are exceedingly delicate and certain rules must be observed:

1. The agent must be absolutely motionless, be silent, and have his back turned to the percipient. This is fundamental.
2. The choice of the number, the card, or the drawing must be made by pure chance.
3. No result, whether success or failure, should be told to the percipient before the end of the sitting.
4. Not more than twenty trials should be made on any one day.
5. All results, whatever they may be, should be stated in full.
6. The percipient must be unable to see anything, directly or indirectly; it is best that his eyes should be bandaged and his back turned.

An important question then arises, which we shall deal with later: Is the lucidity telephathic or non-telepathic? Telepathic lucidity certainly exists; it has been proved by numerous experiments. Non-telepathic lucidity is also proven, but fresh experiments are required.[1]

These methods are not emotional or dramatic like experiments made with powerful mediums, or records of monitions of death, but they are precise, and, when the experiment is well designed,

[1]The difficult but essential experimentation to clear up this arduous problem might be attempted as follows: It might not be difficult to find some intelligent and trustworthy teacher in a primary school who would undertake it.

To a class of 30 the teacher would show 36 pictures in six groups, each group being composed of six different subjects of the same type such as the following, which I suggest as suitable:

1. *Vegetable kingdom.*
   Oak,
   Rose,
   Mushroom,
   Potatoes,
   Field of wheat,
   Palm-tree.

2. *Animal kingdom.*
   Fish,
   Spider,
   Horse,
   Elephant,
   Pigeon,
   Flock of sheep.

3. *Celebrated men.*
   Æsop,
   Cæsar,
   Christopher Columbus,
   Napoleon,
   Charlemagne,
   President Carnot.

4. *Manufactured objects.*
   Key,
   Book,
   Lamp,
   Carriage,
   Ship,
   Gun.

5. *Anatomical.*
   Ear,
   Eye,
   Skeleton,
   Hand,
   Heart,
   Mouth and lips.

6. *Historical pictures.*
   The Crucifixion,
   Battle of Eylau,
   Death of Cæsar,
   The Pyramids,
   Millet's "Angelus,"
   The Marriage at Cana.

The designs should be numbered from 1 to 36, and would be printed on 36 cards. The subjects chosen are such that no confusion is possible. In each group there would be two in blue, two in red, and two in yellow. Probability in choice would then be 1 : 6 for the group, 1 : 3 for the colour, and 1 : 36 for the subject, and 1 : 18 for group and colour combined.

Experiment would be made in the following manner:

1. For telepathic lucidity. The teacher would draw one of the 36 cards, look at it attentively, mentally pronouncing the name. He would then ask every pupil to write down his guess at the card without any communication with those next him. This would be the first answer.

2. For non-telepathic lucidity. One or two minutes after the first experiment, the teacher would draw one of the 36 cards, but would not look at it, so that no one would know what card had been drawn. The children would then write a second answer.

By repeating this experiment with 30 pupils for ten days, we should have 600 replies, which would be enough for some inference.

We hold such packs of cards at the Metapsychic Institute, Paris, at the disposal of any one who would consent to undertake this experiment.

Of course every answer must be included without any exception, and no opportunity must be given to the pupils to see the face of the teacher during the experiment for telepathic lucidity. The names of the children should be attached to their answers to ascertain those who may have exceptional powers.

M. Carré, a teacher at Oissery, was obliging enough to make this experiment. With telepathy, i.e., when he knew the card chosen (probability 1 : 36), he obtained with 27 pupils, giving 1,215 answers, 31 successes, the probable number being 33. This result is entirely due to chance.

When the teacher did not know the card, the number of answers was 1,125, with 25 pupils, and there were 48 successes, the probable number being only 31. There were considerable differences between different pupils. The probable number on 90 answers for each pupil being 2, there was one

undeniable. The results are clear. Chance is not a factor in physical and chemical experiments; why should it be in metapsychic science? If an event takes place against odds of 1:100,000 I shall not decide that it has come about by chance, and two or three equally unlikely events occurring give a certainty that there is some cause in action. The whole crux is that the experimental method should have been perfect. All our efforts should be concentrated on this.

We conclude, therefore, from these experiments to which the calculus of probabilities can be applied, that lucidity or transmission of thought is a reality even among normal persons, without calling in hypnotism or spiritualism. In other words, there is a faculty of cognition other than the usual faculties; it exists in nearly all human beings, even those that seem least sensitive, but in these latter it is so slight as to be almost negligible.

This faculty is more readily called into play by keen emotion or by some violent event than for the cognition of a number or a card, though by these means it may be made apparent to some small extent. In most non-sensitives it is so vague and so indistinct that it is difficult to verify, but by making a large number of experiments a trace of its existence can be found.

It is probable that this cryptesthesia is often telepathic, but the telepathy is but one of its forms, perhaps the commonest. Experiments on normal persons indicate both telepathy and lucidity, and both are probable, however feeble and imperfect they may be. It follows that the thought of one man is mysteriously linked to that of others. We are not isolated, but are in some obscure connection with our fellows; there is some truth in the idea of what has been called the soul of the crowd. A current of sympathy or anger, of indignation or enthusiasm, powerful though undefinable, may lead to well-nigh unanimous

who was right 7 times and two who were right 6 times. This would appear to provide material for interesting research.

M. Warcollier has suggested an ingenious proceeding—to utilize the old game of "meeting": taking the 13 diamonds from the pack, lay them down back upwards without the face having been seen. The player who has not seen the diamonds takes 13 clubs in his hand and places one on each diamond. The probability of success, i.e., that both cards will be of the same value, is 1:13. Interest may be given if the banker pays 13 pence at each success and receives a penny for each non-success. The play is fair and amusing. Would the problem be different according as the banker knows the diamond (telepathy), or does not know it (lucidity)? The club cards are seen by the player, the diamonds are not.

feeling in a theatre, in a court, or a Parliament, sweeping away all barriers in its course. Is it permissible to compare this collective emotion to the mental transmission observable in the experiments detailed above?

Unfortunately mathematical reasoning does not carry much conviction. "Chance" is constantly put forward, and possibly with reason, for the divergence between the probable number of successes and those due to cryptesthesia is insufficient to convince. But we shall see in subsequent chapters that this strange faculty is very greatly developed by hypnotism and mediumship, and this will bring complete conviction of its existence.

2. *Cryptesthesia under Hypnotism and Magnetic Treatment*

The history of hypnotism is curious and a striking instance of a quite revolutionary change in ideas; for from 1790 to 1875, somnambulism and animal magnetism were held to be occult sciences unworthy of the attention of scientific men. It was ill-omened and forbidden ground.

Mesmer, and after him Puységur, Deleuze, Husson, Braid, and Liébeault, had, no doubt, made some remarkable experiments, but these were not sufficiently exact to win official recognition which is always slow and tardy; they were not such as to detach the physiology of hypnotism from its mystical associations.

In 1875, while still a student, I was able to show that hypnotism is not an illusion due to skilful or gross fraud, but a physiological and psychological fact, as natural and experimentally demonstrable as the tetanus produced by strychnine or sleep induced by opium.

To show the general state of mind in 1875 when, two years before Charcot and Heidenhain, I published my researches, it will suffice to quote the opening words: "It needs some courage to use the word 'somnambulism.' Perhaps today less courage is needed to speak of materializations."

Somnambulism is now a recognized and unquestioned fact that no longer pertains to metapsychics.

There are, however, some episodes in its history that have to do with cryptesthesia. It may well be asked: (1) Whether the so-called magnetic action of the magnetizer is in any way specific; in other words, whether there are magnetic emanations perceptible only by sensitives; (2) whether the hypnotic state generates cryptesthesia.

(a) Magnetic Emanations

The point to be determined is whether, when the old method of passes, used by Du Potet, Deleuze, and Lafontaine (which I have often practised and which is still frequently used), disengages some special human power—a "magnetic fluid"—which acts on human beings. To this important question no satisfactory answer can yet be given.

The simplest hypothesis, and the one that is current today, is that when a subject goes to sleep, this takes place by suggestion, verbal or otherwise, and consequently that the so-called magnetic passes are merely accessory or useless, unless as reinforcing suggestion. It is said that silence, dim light, a certain tension of mind caused by these preparations, and a series of tacit or spoken suggestions all contribute to bring about the hypnotic state without calling in any "magnetic fluid." The somewhat dramatic emotion caused by the passes contributes to the effect. Later on, when semi-unconsciousness has been obtained, custom and habit play a preponderant part in later sleeps. Passes are always symbolical; if a person has once been put to sleep he will always be more easily put to sleep, whether by the same magnetizer or by another. There is no need to invoke a magnetic fluid or a new form of energy. Such is the opinion current among medical men (Babinski).

They state further that imitative suggestion is often enough to explain hypnotic phenomena. If in a hospital ward, a barracks, a school, or a cloister, one sick person, soldier, child, or nun has been put to sleep it is easy to do the like with most of the others. There is a real nervous contagion, as may be seen in the demoniacal epidemics of the Middle Ages, or the convulsionists and hysterics of more recent times.

A kind of hypnotic sleep may be produced in animals by a stationary and brilliant object. Fr. Kircher showed in the seventeenth century that a hen could be paralyzed by putting the fowl on its back and drawing a chalk line on the ground from its beak. In the same way it is said the hypnotic state can be induced in certain persons by fixed gaze at a crystal ball or some bright object.

I have never been able to verify anything of the kind. Magnetic sleep can certainly be induced in those used to it by a bright object; but with such persons anything will suffice. The

eyes soon close and loss of sensation supervenes, at first slight, but increasing as consciousness disappears.

Hypnotism by fascination must be akin to that produced by a bright object. A certain Donato had remarkable powers (or skill) of this kind. He would choose from a large audience five, six, twelve, or even twenty persons, who were certainly neither confederates nor accomplices, would take them on the stage, look fixedly into their eyes, and after half a minute or less would turn them into automata having no will of their own. If after half a minute he did not succeed (which happened often enough) he left the refractory subject and went to another. In a few minutes he thus collected some fifteen persons, often quite young people, who obeyed the most absurd verbal suggestions.

These cases have been compared to the fascination exerted by some animals—a snake, or a pointer dog—but such analogies are very vague.

However, hypnotic sleep can be induced in many persons, though not in all, by some means or other—by passes, by a bright object, by a fixed gaze, or by verbal suggestion. Imitation and repetition greatly favour success.

But is this the whole story? Is there any positive proof that any so-called magnetic vibration proceeds from the magnetizer to the hypnotized person? If one were as little exacting and as little precise as the magnetizers of 1840, some reasons might be alleged in favour of the hypothesis of a human magnetic "fluid"; but nowadays we are less credulous.

I shall therefore set aside the notions of Reichenbach on odic force, of Baraduc on "effluvia," of Charazain on human polarity, for these allegations, mystical rather than scientific, are founded on imperfect data. Nevertheless, it would be somewhat rash to reject off-hand the hypothesis of a magnetic fluid; and we shall make a brief study of it.[1]

In the first place, it certainly appears that some magnetizers have more power than others. This is unquestionable, however little observers may have known how to study it.

If I may be permitted to quote my own experience, I may say

[1]Baréty, *Le magnétisme animal étudié sous le nom de force neurique rayonnante et circulante dans ses propriétés physiques, physiologiques et thérapeutiques,* Paris, Doin, 1887. H. Baraduc, *Les vibrations de la vitalité humaine,* Paris, J. B. Baillière, 1904. *La force vitale, notre corps vital, fluidique, une formule barométrique,* 1905. M. Benedikt, *Die latenten Emanationen der Chemikalien* (C. Konegen, Wien, 1915).

that formerly, when I certainly operated less skilfully than I do now, I could induce the sleep quite easily even in insensitive subjects, whereas at the present time I can scarcely ever produce the least hypnosis in any person. Dr. Maingot and Dr. Emile Magnan, who were once very powerful magnetizers, have observed the same thing. Formerly "they could do what they pleased," they told me; but now, though not old men, they were surprised at their inability to induce deep hypnosis.

Under different circumstances when an attempt was made to hypnotize me, I seemed to perceive that some persons, such as J. Ochorowicz, the magnetizer Cannelle, and Dr. Faivre, acted on me fairly speedily and produced a somnolent state, whereas the efforts of others were fruitless.

Mr. Sydney Alrutz,[1] a professor in Upsala University, is inclined to think (and the opinion is shared by Sir William Barrett) that a certain fluid is emitted by the human body which acts directly on the sensitive. Magnetizing a finger of the subject through thick glass, the eyes of the subject being bandaged, the finger becomes absolutely insensitive. But it is nearly impossible to avoid all suggestion and it is one of the most difficult experiments to conduct satisfactorily.

The question must therefore be considered still open. It would be interesting to study it exhaustively. Are the phenomena produced by a magnetic fluid, by verbal suggestion, by hypersensibility of the normal senses, or by telepathy? All these hypotheses are admissible, and in despite of many investigations it is impossible to say. Myers says, "It is probable that magnetic passes have *per se* a certain specific power." [2]

I go a little further in doubting, and say—it is *almost probable.*

No great confidence can be placed in the statements of magnetized persons when they say they see effluvia. "Most somnambules," said Deleuze in 1813, "see a bright and shining light round their magnetizer emitted strongly from his head and his hands." But this has not been repeated and is certainly a case of suggestion. A. de Rochas, despite his undoubted talents and persevering efforts, has been unable to demonstrate the externalization of sensibility in any rigorously scientific manner. I

[1]Sydney Alrutz, *Erscheinungen in der Hypnose* (*Zeitsch. für Psychologie,* 1909). W. F. Barrett, *Some recent hypnotic experiments* (*J. S. P. R.,* January, 1912, 179-186).

[2]*Human Personality,* i, 404. See also Mrs. Sidgwick and A. Johnson, *S. P. R.,* January, 1912, 184.

put aside the perception of effluvia from a steel magnet, for this radiation is not within the province of metapsychics.

I cannot accept the ideas of A. de Rochas on exteriorization of sensibility because I think he has not been sufficiently on his guard against suggestion. Excepting the instance in which he worked on sick people in the hospital at Luys, some of whom certainly were fraudulent, his subjects were honest, but the successes he obtained seem due to suggestion; few have obtained them after him.

According to J. Maxwell, it is possible, after sitting for a considerable time in complete darkness, to see luminous radiations from the fingers. This question has been exhaustively treated by De Rochas.[1] He refers also to observations by Dr. Walter Kilner of St. Thomas's Hospital, London, and to others by Dr. O'Donnell of the Mercy Hospital, Chicago. It would seem that by looking at the nude body of a human being through certain screens in a darkened room luminous effluvia can be seen that follow the outline of the body; but as these two doctors do not state the exact nature of these screens, they do not really tell us anything.[2]

On this subject A. de Rochas very aptly quotes Reichenbach's careful experiments. These are disputable, but ought to be resumed and reconsidered.

As for the aureoles of saints and luminous hands, these cannot be allowed any scientific value.

In fine, the whole of this question needs to be reopened *ab ovo* with the rigorous methods of investigation that we have at our disposal today.

This is not to allege that the problem is easy to solve. The curious history of Blondlot's N-rays shows how difficult it is to avoid illusion and hypothesis.

The aura, the astral body, the perisprit, the odic effluvia are all names for the same thing—a human or animal radiation. It may be that this radiation is a fact, anything is possible, but up to the present no one has been able to prove it. If, or when, it should at last be verified, all that Reichenbach, De Rochas, and the old magnetizers have said would be linked up with it; and

[1] *Les radiations lumineuses du corps humanin.* (*A. S. P.*, September, 1911, xxi, 264.)

[2] Is it dicyanin? See G. de Fontenay, *L'aura humaine et les écrans du Dr. Walter Kilner* (*A. S. P.*, March, 1912, 74).

I should not be very greatly surprised if this discovery were made; but this is not the case as yet; there is not even the beginning of a sound proof.

Dr. Joire has made some experiments of exteriorization of sensibility which would seem to support the idea; but there are no grounds for supposing that this sensitiveness is apparent at one, two, or ten centimeters' distance from the surface of the skin. Probably it is but a special variety of lucidity or cryptesthesia. Its mechanism is certainly less simple than De Rochas indicates in the schematic diagram he gives (Fig. A, p. 57, of his book) showing a series of sensitive layers forming an imaginary envelope to the cutaneous surface.[1]

The magnetizers gave the name "rapport" to the relation that they supposed to exist between the magnetizer and his patient; this relation being such that the sensations of the former were perceived by the latter, who could also divine the thought of the magnetizer without the utterance of any word. P. Janet, a careful and sceptical observer, has verified that Léonie B., being put to sleep by himself or his brother (from whom Léonie in her sleep was unable to distinguish him) could recognize *exactly* the substance that he placed in his mouth—sugar, salt, or pepper. One day his brother, J. Janet, in an adjoining room, scorched his right arm above the wrist. Léonie, who could have known nothing about it normally, gave signs of real pain, and showed to P. Janet (who knew nothing of the occurrence) the exact place of the burn. Evidently this was not due to chance, but rather than admit a transfer of sensation I should call it a fact of cryptesthesia, which involves no hypothesis.

G. Delanne quotes various instances in which sleep has been induced from a distance without any possible knowledge by the subject of the attempt of the magnetizer to put him to sleep.[2] But the perspicacity of these subjects, both conscious and subconscious, is so acute that no certain conclusion can be deduced. In the celebrated experiments by Dr. Husson with Mme. Sanson, all necessary precautions do not seem to have been taken.[3]

[1] *A. S. P.*, 1897, see the discussion raised *J. S. P. R.*, December, 1906, p. 535. See also: Reichenbach, *Le fluide des magnétiseurs, précis d'expériences sur ses propriétés physiques et physiologiques, classées et annotées,* by A. de Rochas, d'Aiglun, 8vo, Paris, Carré, 1891.

[2] F. Delanne, *Recherches sur la mediumnité,* 1902, 259-280.

[3] On this obscure subject see F. Myers, *Human Personality,* i, 524-533. There are also some observations by J. Héricourt, De Dufay, De Wetterstrand, and De Man. de Tolosa-Latour; but I repeat I am unable to come to a conclusion.

The existence, then, of a vital fluid or magnetic effluvium is not demonstrated. Nevertheless, I should incline to the opinion that if hypnotizable subjects who had not yet undergone the experience were magnetized successively by two persons, A. and B., the former known to have strong magnetic power, and the latter devoid of it, but proceeding apparently in precisely the same fashion, nearly all the sensitives would be put into the sleep by A. and scarcely any by B. This is only a guess; I mention it as it would seem to suggest an experiment that might give a clear result, if correctly performed.

If Donato and some others brought about this quick and crude fascination, how much is due to the skill acquired by long experience, and how much to personal influence? I could not say; but I imagine that to speak of Donato's skill scarcely covers the facts and that some special physiological influence emanating from him is not improbable. But all this is very vague.

Have magnetic passes any effect upon animals? Rabbits and frogs can be hypnotized, or reduced to a state of torpor and passiveness that somewhat resembles the hypnotic state in human subjects. But even if the hypnosis of animals (the cataplexy of Preyer) be absolutely true and easy to verify, that proves nothing as to the alleged human effluvia. If, as I have several times observed, a frog after having been gently massaged for a few minutes stands quite still and seems paralyzed, may not this be the effect of slight cutaneous excitement exhausting its nervous centres? Is fear a possible cause? Certain animals, insects especially, feign death as a means of protection.

As to this physiological influence of magnetic effluvia we are wandering in absolutely unexplored regions. I do not even see how good experiments could be made to establish the reality of such emanations.

The magnetizer Lafontaine declares that he magnetized a lion. The story is amusing, but certainly not proof against criticism.

Has human magnetism a healing power on the sick? Certainly it often has; if the magnetizer places his hand on a painful spot the pain is relieved. But what is the part played by suggestion, since we know from Bernheim and other physicians that certain neuralgic affections, headaches, and rheumatic pains can be greatly relieved by suggestion alone?

Liébeault was able to produce healing effects on children under three years old; he quotes forty-six cases of treatment of

children under four; which excludes suggestion. Ochorowicz has told me definitely that he has been able to relieve pain and reduce morbid action by imposition of hands on children under two years old. Healers proceed in this manner and perhaps the curative action is not imaginary.[1]

All this adds up to very little, strictly speaking to nothing. There is as yet nothing that clearly shows that a special fluid is released by an act of will.[2]

The only demonstration that would tend to prove magnetic action would be to prove that a magnetizer can put a subject to sleep from a distance.

Unfortunately, the experiment is not at all easy to carry out, for we must take account of the extraordinary vigilance displayed by the subjects who, consciously or unconsciously, gather the faintest indications and seek with quite disconcerting acuteness (which is in no way metapsychic) to guess the intentions of the magnetizer. The slightest noise, the least glance by persons round them, suffices for them to guess the presence of the magnetizer or his desires, to which they eagerly conform. In a celebrated experiment, Du Potet in 1827 succeeded in putting Mme. Sanson to sleep without her being aware of his presence, as he states. But is that quite certain? Husson and Récamier were there; may not their presence have been an indication to Mme. Sanson?

Many experiments have been made to verify this fluidic action at a distance. I quote among the latest those by Pierre Janet, Boirac, J. Ochorowicz, J. Héricourt, Dr. Dusart, and my own, and I must say none carry conviction.[3]

[1] I cannot here touch upon the history of curative magnetism which begins with Paracelsus and Goclenius, *De magnetica vulneris curatione citra ullam et superstitionem et dolorem et remedii applicationem*, Marburg, 1610. Faith-healing, the miracles at Lourdes, stigmata might here be examined; but the psychic action of the central nervous system is not within the domain of metapsychics. It is likely that healing magnetism is not wholly suggestion, but the part played by suggestion is not yet determined.

[2] *L'extériorisation de la sensibilité. Etude expérimentale et historique*, by A. de Rochas, 1 vol., 8vo, Paris, Chacornac, sixth edition, 1909.

[3] P. Janet et Gilbert, *Sur quelques phénomènes de somnambulisme, Bull. de la Soc. de psychologie de Paris. Revue philosophique*, 1886 (1), xxi, 190-198. Ch. Richet, *Un fait de somnambulisme à distance, ibid.*, 199-200. J. Héricourt, *Un cas de somnambulisme à distance, ibid.*, 200-204. A. Ruault, *Le mécanisme de la suggestion mentale hypnotique. Revue philosophique*, 1886, (2), 691. Boirac (cité par Flammarion), *L'inconnu et les problèmes psychiques*, 310. Dusart (cité par Flammarion), *ibid.*, 308.

And yet if, as will be abundantly demonstrated in the sequel, there really is a special crypthesthetic faculty which reveals facts that our normal senses cannot supply, it is easy to conceive that the influence of the magnetizer may be more or less clearly perceived by a sensitive subject; so that magnetization from a distance becomes but a mode of cryptesthesia.

Even admitting human effluvia, the emission of a special fluid, or specific vibrations, there is nothing to show that this is comparable to a *rhabdic* force—that which turns the divining-rod, a power emanating from things awaking cryptesthesia. The emanations from things are probably not identical with those from magnetizers. Will has nothing to say to them since they proceed from inanimate objects.

Distance also counts for nothing. There have been cases of lucidity at a distance of more than six hundred miles between agent and percipient, so that exteriorization of sensibility by spheres surrounding our cutaneous integument to a distance not exceeding a few yards, is not even a plausible explanation.

Indeed the impression of a form, a name, or an image is sometimes so precise that it is not sufficient to speak of an "effluvium that causes sleep." The cryptesthetic cognitions are detailed, minute, and complete. In other words, it is proved that certain individuals acquire by cryptesthesia knowledge that their ordinary senses do not give them; but that is all that is really demonstrated. No one has yet proved that there are human effluvia liberated by the will of the magnetizer, which have the power to induce sleep.

As for the influence of one human thought on another, thought-transference, mental suggestion, and telepathy do not belong to hypnotism; they are the fundamental phenomena of subjective metapsychics, and will be studied in full detail later on. From this point of view somnambulic sleep at a distance and the action of magnetic emanations pertain to cryptesthesia. But this latter is proved whilst the former are not.

(b) The Development of Cryptesthesia by Hypnotism

In certain cases lucidity can be verified quite apart from any hypnosis or any kind of sleep; and most of the monitions we shall presently speak of refer to normal individuals. Similarly certain very remarkable facts of experimental lucidity observed

in spiritist séances have been manifested by mediums that no one had hypnotized, who were apparently (perhaps only apparently) in a quite normal state.

It is therefore evident that cryptesthesia can exist apart from the hypnotic state; but it is not less well established that hypnosis increases cryptesthesia. Various persons quite incapable of any transcendental manifestations when their senses are awake, become lucid when hypnotized. Instead of supposing the (very doubtful) existence of an unknown magnetic fluid arousing cryptesthesia it is better to admit that the hypnotic state facilitates cryptesthesia because it suppresses or reduces normal perceptions. This is a hypothesis, but a likely one.

In the normal state we are conscious of our existence, and of many sensations that our senses bring to us. The sensations of sight and hearing continuously reach our consciousness and keep it aroused. These sensations are so numerous and so strong that other vague and confused ideas that another mysterious sense might give us find no place. We are like a person walking in the sunlight who is unable to see the dim light of the glow-worm in the hedge that becomes easily visible at night. This is but an analogy, but one that explains why both hypnosis and normal sleep, suppressing or reducing normal sensibility, should favour lucidity.

Under profound hypnosis the subjects are insensitive, and surgical operations can be performed on them without their feeling pain. I have often seen a young woman, in deep hypnotic sleep, making neither movement nor gesture when flies were walking on her lips and nostrils. Sometimes the loudest noises are unheard and do not awaken the person. Good subjects when hypnotized are insensible to ordinary stimulation, and this may render them more sensitive to the stimulations of an unknown kind that awaken cryptesthesia.

Similarly many monitions have been recorded, taking place in normal sleep. M. Warcollier has drawn up statistics on the frequency of monitions in sleep or when half awake. The senses are then benumbed as in hypnotic sleep; and the unknown vibrations, doubtless very feeble, that arouse cryptesthesia can be more readily perceived. To hear a slight sound, other noises that mask it must be absent. Hypnosis and sleep bring to consciousness the darkness and the silence necessary to the perception of minute forces.

The so-called divinations by which somnambules diagnose disease and its treatment find their place in a study of cryptesthesia. I shall not insist on the therapeutic side; an exact estimate of its efficacy, even in normal medicine, is such a delicate matter that it is impossible to say what may be valid in the treatment advised by somnambules. Moreover, it has been abundantly proved that suggestion acts with great power on the sick. Everyone knows the stories of miraculous cures at Lourdes, resembling those that were seen two centuries since at the tomb of Deacon Paris. Perhaps it would be well to bring some of these authenticated cures into the domain of metapsychic science. Without drawing any conclusions, I will mention three which by the complexity of their phenomena touch metapsychics in some measure.

The first case is one very carefully observed by M. Mangin.[1] It was a case of paraplegia in Mlle. B., aged twenty-eight; duration of the disease, twenty-five months; her arms only were capable of some movement, she could barely turn her head; there was double curvature of the spine, wheeze and dull spots on the lungs. Temperature 102.2 in the evening. Three doctors in succession gave the diagnosis following:

1. Paraplegia; prognosis serious.
2. Potts's disease; compression of spinal column and paraplegia.
3. Paraplegia, medullary lesion; prognosis very serious.

When M. Mangin saw her on the 26th of February, Mlle. B. saw at his side the form of a beautiful woman who told Mlle. B. that she would get well and that on the 8th of May she would be able to get up. From the 26th of February to May 8th M. Mangin magnetized her, and during her magnetic sleep she always saw the beautiful woman. On the 8th of May she was completely cured. She got up, put her feet to the ground, and kissed the face of her imaginary friend, and by the 15th of May seemed to be completely cured; the thoracic trouble and the curvatures had disappeared. The cure was maintained; she married and has had two children.[2]

This case is most remarkable; it is incredible that there should have been three gross mistakes in the diagnosis and that the case should have been one of hysteria.

[1] *Devant le mystère de la névrose. De la guérison de cas réputés incurables,* 12mo, Paris, Vuibert, 1920.

[2] M. Mangin reports a curious instance of premonition made by Mlle. B.

In the two following cases also hysteria is equally insufficient to account for the facts.

A workman named Derudder had both bones of his leg broken in February, 1867. He became worse; there was much suppuration, and no disposition of the bones to unite; the lower part of the leg could be moved in all directions. Eight years later, during a visit for prayer at the sacred grotto of Oostaker near Ghent where there is a grotto similar to that at Lourdes, Derudder felt himself cured, held himself upright, put his feet to the ground and could walk, having been on crutches for eight years.

The case is reported by two doctors and depends on the exactitude of their observations.

The second case is equally strange. In 1897 Gargam was seriously injured in a railway accident; paraplegia supervened with muscular atrophy and the beginnings of gangrene. Two medical certificates put in for the action against the railway company (Paris-Orléans) stated the case as incurable and likely to become worse. At Lourdes Gargam was cured almost immediately when he entered the grotto; he was able to make some tottering steps. The next day the suppurating wounds in the feet seemed cured; he was able to walk without help, in spite of the withered muscles. Three weeks later his weight had increased by twenty pounds, and he could resume his work (*A. S. P.*, December, 1907).

Even if both cases have been correctly reported they do not prove the existence of a new metapsychic power; they only indicate that the central nervous system has an unusual and quite extraordinary power on organic phenomena.

The question is complicated not only by the difficulty of estimating the curative power, but it has been further obscured by considerations of another kind. The enthusiasm of the crowds who visit Lourdes today and formerly went to the cemetery of St. Médard testifies that religious ideas dominate these miraculous cures.[1]

[1]Many "faith cures" are brought forward by Christian Science. This society was founded about 1866 by Mrs. Mary Glover Eddy (December, 1910). See Ramacharaka (Yogi), *The Science of Psychic Healing*, Chicago, Yogi Publication Society, Masonic Temple, 1909. A dissident sect arose under Bishop Oliver Sabin, who wrote a number of books that went through many editions, *Christology, Science of Health and Happiness*, etc. Washington, thirty-second edition. But the point of departure of all these books is the

The cures claimed as resulting from advice by somnambulists constitute a regular traffic, increasing in all countries, though everywhere repressed by legislation as illegal medical practice.

The misuse of professional somnambulism is sufficient reason for excluding alleged cures after such advice from the list of authentic facts. It is, however, difficult to admit that the innumerable consultations of somnambulists in all countries could have grown to such an extent and become so general if there were not some small amount of medical clairvoyance in their advice. In default of this they would soon be abandoned. Moreover, these persons freely pass remarks on each other, such as "X. has great power of lucidity. Y. used to, but has not now. Z. has it but seldom, but on some days is very lucid." It would perhaps be unwise to reject with contempt the record of healing divination by somnambulists.

Still greater reserve should be observed in denying all clairvoyance in diagnosis. Somnambulists seem instinctively disposed to speak of the state of health of those round them. Even when their advice is not asked for they are inclined to say that such a one who speaks to them or touches them is suffering in the heart, the head, or the chest. Everything happens as though they felt the morbid affections of those near them by a kind of telepathy which is organic rather than psychic.

This organic telepathy is clearly manifest in all their words. Alice, who is neither a somnambulist nor a professional medium, exclaims, "I am stifled; I am distressed; it gives me spasms, cramps, or a lump in my throat," when a lock of hair from a sick person is given her. But all this is still too uncertain to allow of any affirmations with regard to lucidity in this special

work of Mrs. Mary Eddy which in 1898 had gone through one hundred and forty editions, *Science and Health, with Key to the Scriptures,* Boston, Armstrong, 1898. For a history of the movement see H. W. Dresser, *Health and the Inner Life,* New York, Putnam, 1906. For the miracles at Lourdes see Diday's *Examen médical des miracles de Lourdes,* Paris, Masson, 1873. Boissarie, *Histoire médicale de Lourdes,* 1858-1891, Paris, 1891. Baugher, *Lourdes et un cas de tuberculose aiguë généralisée* (*A. S. P.,* 1895, 156-158). Berteaux, *Lourdes et la science. Revue de l'Hypn. et Psychol. Physiologiques,* Paris, 1895, ix, 210-216 and 275-278. F. de Backer, *Lourdes et les médecins,* Paris, Maloine, 1905. E. Artus, *Les miracles de Notre-Dame de Lourdes, guérison de Juliette Fournier,* Paris, Palmé, 1872. *Histoire complète du défi à la libre pensée sur les miracles de Lourdes,* Paris, Palmé, 1877. Noriagof, *Notre-Dame de Lourdes et la science de l'occulte,* Chanuel, Paris, 1898, and above all the works of H. Lasserre (one of the first who were cured at Lourdes), *Notre-Dame de Lourdes,* Paris, Palmé, 1885, and new edition, Paris, Sanard, 2 vols., 1898.

form of cryptesthesia. If it were studied methodically and without prejudice, some curious results might appear. In fifty-three experiments of diagnosis of disease by somnambulists undertaken by me with every care to avoid all suggestion on my own part and all normal perspicacity by them, I had only very moderate results. Some were correct, but not so many as to exclude chance coincidences. In a case of strong diarrhea Eugénie said, "Inflammation of the intestine." On a child with measles, Helena said, "It is measles, I saw his face all red." The best of the experiments was number thirteen. Helena said, "Severe pain, choking, pain here (pointing to the epigastric region). There seems to be a sac that ought to be emptied; that sac under my heart gives me great pain." The case was one of tuberculosis, with an abscess full of pus, at the base of the left lung, accompanied by suffocation, dyspnea, and esophagitis. In all these cases the consultation was in the absence of the sick person; the investigation was psychometric (which I call pragmatic cryptesthesia); I gave the sensitive some object, a lock of hair, or a letter from the patient.

These results are imperfect, but in the numerous treatises on animal magnetism that appeared from 1825 to 1855 there are many records that should induce students of metapsychics (among whom there are numerous physicians) to re-open these experiments without fear of ridicule. The history of somnambulism and spiritualism shows how ill-advised official science has been in rejecting *a priori,* without examination, facts that have later on forced this acceptance.

There is a peculiar form of organic cryptesthesia which deserves attention. It was called "autoscopy" by the magnetizers of the first half of the nineteenth century; somnambulists seem able to *see* their organs and to give remarkable descriptions of them. This seems to belong to psychophysiology rather than to metapsychics.

In a normal state the visceral organs do not awake any precise sensations in our consciousness. The functions of the heart, lungs, liver, intestines, and the brain are inappreciable by consciousness, though physiology proves that the viscera have sensory nerves that convey to the nerve centres some notion of the state of these organs.

These impressions are indistinct. They certainly reach the spinal cord and the brain, but they seldom touch the conscious-

ness. Only when disordered are we aware of the stomach, the intestines, or the liver. It is not for want of sensory nerves that this is so, but because the sensory nerves do not affect the consciousness. It may therefore be admitted as probable that in certain special psychophysiological conditions (e.g., hypnosis) the modified and amplified consciousness may be affected by visceral sensations.

Although autoscopy was currently observed from the beginning of magnetism, it was Féré who first used the word (?), though he applied it to the vision of his double by the patient who was probably hallucinated.[1]

This kind of hallucination (external autoscopy), though so interesting from the medical point of view, has no metapsychic significance. Some spiritualist theorists have endeavoured to ascribe to it an importance which it does not seem to me to possess.

Internal autoscopy, mentioned by Du Potet, was carefully studied by Dr. Comar[2] and, later, by Dr. Sollier, who wrote an interesting monograph upon it.[3]

There is no need to examine here the detail in the modalities of autoscopy, for we are on the borderland between the psychic and the metapsychic; nor is there any need to imagine some new faculty of the mind or the nervous system to account for the representation of the viscera to visual consciousness. All the same, this leads to a curious inference.

If it is true that some persons, when hypnotized, hysterical, or otherwise abnormal, have a visual perception of their organs (and this fact, however unusual, must be considered proven), it must be admitted that in certain cases the hypnotized or hysterical patient can be aware of an organic lesion and diagnose its site *by seeing* that lesion. In fact magnetized patients often show a willingness to describe the extent and locality of their malady and to suggest remedies.

[1] *Note sur les hallucinations autoscopiques ou spéculaires, et sur les hallucinations altruistes* (*Bull. de la Soc. de Biol. de Paris,* 1891, 451).

[2] *L'autoreprésentation de l'organisme chez quelques hystériques, Revue neurologique,* 1901, 491.

[3] *Les phénomènes d'autoscopie,* Paris, Alcan, 1903. To avoid confusion, a distinction must be observed between external and internal autoscopy. It is external when the hallucinated subject sees his double outside himself. It is internal when the somnambulist perceives his own organs—heart, liver, intestines, etc., and describes them, whether pathologically or not.

It is even possible that the numerous and authenticated cases of auto-premonition may be due to this internal autoscopy. These auto-premonitions are not premonitions in the true sense of the word as employed in this book. Autoscopy enables a somnambulist to foresee the malady or death just in the same way as an experienced physician can foresee them.

3. *Cryptesthesia under Hypnotism*

Experimental cryptesthesia can be studied in hypnotized persons and in mediums. The medium, during a séance, is usually in trance; but this spontaneous trance is singularly allied to the hypnotic state properly so called, as if the medium were self-hypnotized, without the aid of a magnetizer.

There is, however, no essential difference. The chief difference is that the medium thinks himself to be in relations with real personalities distinct from himself—his guides—who speak by his voice or write by his hand. However, with the hypnotized patient, as with the medium, there are different degrees in the dulling of the senses and diminution of consciousness.

Nevertheless the consciousness of many mediums seems to remain intact; they continue to converse with the persons who may be present while their subconsciousness elaborates other conversations and other acts manifest by muscular movements they are aware of but can scarcely control, as in automatic or planchette writing. I call this semi-somnambulism. Sometimes the dissociation between the normal conscious personality and the new personalities that appear is still more complex; for in some cases the medium will write coherent phrases answering to a personality, D., with the right hand; while with the left, he will write other coherent phrases from a personality, G. And during the whole time he appears normal, laughs, talks, sings, and discusses with the various people present in the circle.

Again, this dissociation of personality, whether in somnambulism or in semi-somnambulism, is not metapsychical; it belongs to psychology. It can be accounted for by a doubling, or more rarely, by a tripling of the personality—a fact that has often been verified. We are here considering the manifestation of lucidity (i.e., of cryptesthesia), rather than these variations in the personality; and the proofs of this astounding cryptesthesia are so

numerous and so certain, that a selection must be made from among them and only the chief ones quoted.[1]

(a) Experiments on Hypnotized Subjects

In the early days of animal magnetism the old magnetizers insisted on the existence of clairvoyance or lucidity. I will cite a few cases only.[2]

General Noizet (quoted by Flammarion, *loc. cit.*, 339), states, in 1842, that a somnambulist told him accurately what he had done during the day, his acts not being at all usual. He had been at the Tuileries in the apartments of the Duke de Montpensier, the king's son; and thence in a carriage with the duke to the Invalides to study certain models of fortifications. All was very exactly detailed, but too much at length to be reproduced here.

According to a letter from Dr. Despine[3] to M. Charpignon, Mme. Schmitz being ill, at Geneva, asked Dr. Julliard to write out an opinion for her. Dr. Julliard, in complete darkness, placed the paper beneath her feet. She said, "My light is there!" and read what Dr. Julliard had written. Charpignon cites other cases of clairvoyance or transposition of the senses. But the precautions then taken were not so stringent as they now are, and doubt is permissible or even obligatory.

It is necessary to be very cautious in drawing conclusions. I will here recall an instance of cryptesthesia that probably involves an error; it will serve to indicate the precautions necessary for a good experiment.

In the presence of M. Legludic, director of the School of Medicine at Angers, Dr. Binet Sanglé made some experiments on cryptesthesia. Two subjects, O. and M., were present. M. was

[1] I may be permitted a certain preference for my own experiments; and must apologize for the large space here given to them, but some are unpublished, and I think, deserve to be remembered.

[2] In old journals of magnetism (German, English, French, and Italian) numerous cases of lucidity are reported; but it is not certain that the blindfolding was such as always to obscure the sight completely. Even when a wad of cotton-wool was placed on each side of the nose, the wad might be displaced enough to permit some little vision. However little, it would be too much. It is probable that the clairvoyance of Pigéaire's little girl was authentic, but the proof is insufficient. See *Journal du magnétisme animal*, by J. J. A. Ricard, Paris, Bourgogne & Martinet, 1840, and Toulouse, 1839, vol. 1, p. 624.

[3] *Physiologie, médecine et métaphysique du magnétisme*. Paris, J. Baillière, 1848, 114.

put to sleep facing the wall, and her eyes bandaged. Dr. Legludic then opened a book at random and underlined the word "vulture." Without saying anything Dr. Binet Sanglé drew the head of a vulture, and M. said, "It is a curious bird, it has no wings, it is a vulture." In another experiment, again opening the book at random, M. J. underlined "slug." M. said, "It is a slug." In a still more remarkable experiment M. J. underlined the verse, "Souffle bise, tombe à flots, pluie!" O, said "S...SS...S..." and at last, "Souffle bise..."

Finally in the same book, opened as before at random, M. J. underlined, "Le Dieu ne viendra pas. L'Eglise est renversée." M. then said, "Le Dieu ne viendra pas." [1]

This experiment would be decisive if there were not possible or probable complicity between O. and M., both of whom were present. Neither can the experiments with the Misses Creery be admitted as valid: wilful or unconscious complicity must always be allowed for in such experiments on cryptesthesia.

William Gregory,[2] professor of chemistry at the University of Edinburgh, verified that Major Buckley was able to develop lucidity in several hypnotizable subjects sufficiently to enable them to read correctly mottoes, letters, addresses, and postmarks, enclosed in envelopes or in shut boxes of wood or cardboard. In one case Sir T. Wiltshire had written "concert" intending to write "correct." The seer read it as "concert." Sir T. Wiltshire said this was an error, but on opening the box the word was seen to be "concert." The statistics given by Major Buckley would be decisive if there were no possibility of error in the methods employed. Mottoes in 4,680 nut-shells, totalling about 36,000 words, were read.

Herbert Mayo, an eminent English doctor and physiologist, sent to an American friend in Paris a lock of hair from one of his patients, Colonel C. A somnambulist in Paris stated that C. was suffering from partial paralysis of the hips and legs and was in the habit of using a surgical instrument for another ailment.

If I cite this case of lucidity, it is not that it is more remarkable than many others, but because it is attested by an experienced

[1] *Expér. sur la transmission directe de la pensée, A. S. P.*, 1902, xii, 131-143.

[2] *Letters to a candid inquirer on animal magnetism* (1851) cité par E. Boirac, in *A. S. P.*, 1893, iii, 242.

physiologist, Dr. Mayo, and convinced him that lucidity is a fact.[1]

Dr. Dufay of Blois had some good examples of cryptesthesia with a non-professional somnambulist, named Marie.[2]

He received one morning a letter from an officer friend who was laid up in his tent from dysentery. He enclosed the letter in two blank envelopes and put it, the same evening, into the hands of Marie. She said that it concerned a soldier suffering from dysentery; and going to find him, she imagined herself going on board ship, was sea-sick, saw some "women in white garments," with beards (Arabs, no doubt). She saw the officer, very thin and pale, on a bed made of three planks on stumps above the moist sand.

The other instance reported by Dr. Dufay is yet more remarkable: A prisoner in Blois jail had just committed suicide by strangling himself with his necktie. Dr. Dufay cut off a piece of this necktie, put it in several folds of paper, and gave it to Marie. She declared that it was something that had killed a man, a cord—no, a cravat; it belongs to a prisoner who hanged himself because he had assassinated a man. She said that he had killed his victim with a hatchet, and indicated the place where the hatchet had been thrown away. The hatchet was found in the place described.

Bozzano (*A. S. P.*, 1910, 120), quotes Dr. Vidigal of São Paulo, Brazil, who brought to his house a young servant aged twelve, who had just arrived as an emigrant from Spain. The evening of her arrival she was put to sleep by a friend of Dr. Vidigal and saw an old woman whose description tallied with Dr. Vidigal's mother, three months dead. The girl added that in this woman's room there was a silk dress and in a pocket sewn into it, seventy-five milreis. On entering this room, which no one had entered for a long while, the silk dress and the seventy-five milreis were found. It is to be noted that Dr. Vidigal had barely been able to meet the expenses of his mother's funeral.

In 1837, at New York, Loraine Brackett of Dudley, a young woman, who was completely blinded by an injury, when hypnotized made mental journeys that showed her lucidity. She was able to describe exactly a picture seen by Mr. Stone in another town representing three Indians round an enormous tree-trunk

[1]Quoted by Boirac, *La Métagnomie* (*A. S. P.*, November, 1916, 159-162).
[2]C. Wallace, *loc. cit.*, tr. fr., 92.

with hieroglyphs upon it. Loraine said: "Three Indians sitting in a hollow tree which looks as if it had been dug out on purpose; and the tree filled with marks." Only Mr. Stone knew this picture.[1]

Mrs. E. H. Sidgwick mentions several cases of magnetic lucidity given by Jane (*A. S. P.*, 1891, i, 280). They are very interesting, and the article by Mrs. Sidgwick may be referred to for the full detail. Dr. F. who magnetized Jane warned one of his patients, Mr. Eglinton, that he would ask Jane what Mr. E. was doing between eight and ten o'clock that evening. Jane said, "I see a very fat man with a wooden leg, he has no brain. He is called Eglinton. He is sitting before a table where there is brandy, but he is not drinking." A very curious result: for Mr. E. who is very thin, had made a corpulent dummy and placed it before a table with a bottle of brandy.

Alexis, in a series of fourteen séances at Brighton, played at cards, naming the cards of his opponents as well as his own, though his eyes were blindfolded, gave lines out of a closed book, and described the contents of shut boxes.

Robert Houdin, the celebrated conjurer, had an interview with Alexis. Houdin drew a book from his pocket, and, opening it, required Alexis to read a line eight pages back at a certain level, which he marked by inserting a pin. This was done and Houdin found the feat stupefying. He signed the declaration, "I affirm that the above facts are scrupulously accurate."

Houdin, after verifying that the phenomena of clairvoyance displayed by Alexis could not be imitated by any conjurer, says that Dr. Chomel, having shown Alexis a certain medal, Alexis told him, "That medal was given to you under peculiar circumstances. You were then a student in a garret at Lyons. A workman whom you had done a service offered you the medal which he had found in some ruins." This was exactly true (Delanne, *Recheches sur la médiumnité,* 1902, 236).

Alexis gave President Séguier a proof of lucidity (not telepathy) of a very curious kind. Alexis, mentally travelling to the President's room, saw a handbell on the table. "No," said M. Séguier, "there is no handbell." But on returning home that afternoon he found that a handbell had been placed on his table. The President had not given his name (Delaage, *Les mystères du magnétisms*).

[1] *Animal magnetism. Letter of Mr. Stone to Dr. Bigham, P. A. S. P. R.,* 1907, 106.

Many other proofs of the extraordinary powers of lucidity possessed by Alexis are reported by Flammarion; and Dr. Bertrand, the magnetizers Pététin and Lafontaine, and especially Dr. Frapart have noted so many varied and striking instances that it is impossible to doubt the wonderful metapsychic faculties of Alexis Didier.

Robert Houdin, who was certainly one of the most expert conjurers of any day, verified and attested the clairvoyance of Alexis, who not only told the cards that Houdin held in his hand, but those he was about to draw from a new pack.[1]

Alphonse Karr and Victor Hugo obtained decisive proofs of cryptesthesia with Alexis, hypnotized by Marillat. The testimony of Alphonse Karr and Victor Hugo would be insufficient if it referred only to a game at cards played with Alexis, for clever prestidigitation can do anything of the kind, but there is much more; Alexis told Alphonse Karr that he (Karr) had placed a branch of white azalea in an empty bottle before leaving his house; which was the fact. Victor Hugo had prepared a packet tied up with string in which he had written the word "politique"; this was read by Alexis. Alexandre Dumas also tells of a memorable séance, but his testimony is less precise.

Alexis,[2] when M. Vivant came to consult him, said that he had come concerning some lost object—four banknotes of one thousand francs—which was correct, and he added, "Do not complain to the police, no one has stolen them, they have fallen behind a drawer in your desk." M. Vivant, on returning home, found them there.

I cannot at all understand why Hyslop declines to admit Alexis' cryptesthesia since he attests such complete and perfect cryptesthesia in Mrs. Piper (*Enigmas of Psychical Research,* Boston, 1906, 274). M. Osty has given much evidence of the conditions of hypnosis and lucidity of Mme. M. (*Lucidité et intuition, Etude expérimentale,* Paris, Alcan); he is also about to publish a work in which the fine cases of lucidity by Mme. M. will be completely described. I know of some that are striking. But in the book already published representing so much patient work,

[1]*Confidences d'un préstidigitateur, une vie d'artiste,* Paris, libr. Nouvelle, 1859, 2 vols. If the journals of the time are inaccessible, the study by Camille Flammarion, *La mort et son mystère,* 1920, i, 209-233, may be read with profit.

[2]Cited by Delaage, *Le sommeil magnétique.* After Bozzano, *Dei fenomeni di telestesia, Luce e Ombra,* 1920, xx, 124.

there is not a single case that can be quoted as evidence of lucidity. It is probable, according to what he says, that Mme. M. Freya and M. Flourière gave him many, but we have to take his word for them. However, on p. 304, he cites a case that seems positive, but omits to tell us how far the statements of the sensitive were correct.

Dr. Souza Couta of Lisbon, in a séance at which Dr. O., also of Lisbon, was present, asked the entranced medium to visit Dr. O.'s house. The medium said that he (or she) saw two ladies, one of whom was a girl, reading a book—*Le Diable à la cour.* He described the room, a dining-room containing two vases, which he described, and a piano (*A. S. P.,* 1905, xv, 707).

M. Melvil Roux, an architect, relates that he had the opportunity of seeing a woman of about sixty, a servant, magnetized by M. Salles, a bookseller of Nîmes. Three years before M. Roux had been charged with some repairs to the funeral crypt of the college at Alais. The subject described this crypt, and looked in, despite her fear; she said at once, "There is snow" (it was chalk) and then, that there were some sacerdotal vestments. She also read some words (Flammarion, *loc. cit.,* 329).

Dariex cites the lucidity of a woman named Marie. The magnetizer gave her various orders which were carried out. One day a watch was hidden in a bookcase. She went to the bookcase, found the watch and returned, showing her pleasure. The order had been given mentally. Another time, also in obedience to a mental order, she fetched a glass, and filled it with water, adding a few drops of eau-de-Cologne.

In 1850 eleven fishing boats left Peterhead for whaling; a person in the magnetic sleep said that the first boat back would be the *Hamilton Ross,* and that the second mate, Mr. Cardno, had lost some fingers by an accident; both of which statements proved correct (*A. S. P.,* 1891, i, 270). One of my relatives, a distinguished magistrate, told me that in his youth he had heard the old nurse of one of his friends, in a somnambulic state, announce that the brother of that friend, an officer of engineers, then before Sebastopol, had been seriously wounded in the right arm; it was so.

The wife of a major in the artillery at Colaba, two miles from Bombay, magnetized a Creole girl—Ruth—who *saw* in a glass of water, and gave many proofs of lucidity. Before a great polo

tournament Ruth described one of the officers who would take part in it, and finally named Captain X., saying that he would be bitten on the leg by a horse; which came to pass. Another time, before the judge of a neighbouring district, Ruth described his room, the coffer that was in it, and said that certain papers had been stolen by a person whom she described, whom the judge recognized, and who was afterwards convicted.

Dr. Ferroul, the mayor of Narbonne and deputy for the Aube, made some noteworthy experiments on the lucidity of Anna B., a young woman whom he put into the somnambulic state. An amusing incident is related by him. Being editor of the *République Sociale,* a socialist paper of Narbonne, and having a crow to pluck with the prefect of the Aude, he obtained through Anna some confidential details which he published in his paper. The prefect, supposing the revelations to have been made by two agents of the secret police, dismissed them. They were proved innocent. It was solely by the lucidity of Anna that the knowledge of the facts had come to Dr. Ferroul.

Some further interesting experiments were made with Anna, which at first seemed to establish the fact of her vision through opaque paper. A line was written, "Your party is certainly killing itself by subservience." This was folded, put into an outer green envelope, enclosing another envelope, and the whole wrapped in two pieces of squared paper. The writing was read by Anna. Grasset, the eminent professor of the Medical Faculty of Montpellier, subsequently gave Dr. Ferroul another opaque envelope containing two verses that were immediately read by Anna (*A. S. P.,* 1896, vi, 145).

This experiment, which appeared decisive to Grasset, was followed by a failure. A commission was named, and no result secured. It is well known that for various reasons scientific commissions rarely reach a definite conclusion, but nevertheless there is reason to doubt the experiments of Dr. Ferroul with Anna.

Covers may be still more opaque without intercepting vision. My learned friend, Abelous, professor of physiology in the Faculty of Montpellier, placed a white envelope sealed with a red seal and two unexposed photographic plates in a box of thick wood. By the pressure of the seal the wax had extended into blisters round the impression. A young sensitive, hypnotized by Dr. Marqués, saw "something round, red, which seems to have rays

round it." In another box Abelous had placed a casket containing a medal of Professor Grasset. The seer said, "It is a medal representing a man with a beard and tangled hair." This was characteristic of Grasset's appearance. This is more probably due to a new and unknown faculty than to hyperacuity of retinal vision.[1]

The Rev. Mr. Lefroy, who disbelieved in lucidity, made an experiment with Miss X. at Zermatt. He wrote the word *Heautontimoroumenos* on a piece of paper that Miss X. could not see. She said, "It is a very long word, there are two m's, and it begins with an H." He then tried easier words; he wrote Ink, and Miss X. said, "Ink." He wrote Toy, and Miss X. said "Yot" (*Phantasms of the Living*, 1885, ii, 655).

Dr. Terrien, president of the Society of Medicine, at Nantes, went to visit a patient at Chauché, about five miles from the town where he lived. At Chauché he was detained by various cases, among them that of a child that had hurt its knee by a fall from a ladder. This was related to Mme. Terrien by a young sewing maid working with her, who had occasional fits of somnambulism.[2]

Mr. Adamson, who occupied a high position in the administration of South Australia, having lost a pencil-case that he greatly valued, asked a young girl presumed to be clairvoyant, who told him that it had been found on the high-road, and placed in a box. She described the house and the appearance of the finder. It was returned to the owner next day; all the details related being found perfectly correct.

Dr. Osty has studied in full detail one of the best cases of cryptesthesia on record. For various reasons the names cannot be given; I therefore use pseudonyms, and change dates and places.

On the 23d of September, 1919, M. Nicholas Cordier, a municipal councillor, a well-to-do bachelor, and given to botanical research, went for a botanical excursion in the Vosges Mountains. He failed to return in the evening. His mother and the relations who lived with him became anxious, and during the

[1] *Sur une observation de vision extra-sensorielle, Mélanges biologiques pour le jubilé de Ch. Richet,* Paris, Alcan, 1913, pp. 1-5.

[2] *Essai d'interprétation d'un cas curieux de vision et d'audition à grande distance chez une hystérique de quatorze ans durant l'état de somnambulisme* (*A. S. P.*, July, 1914, xxiv, 198-203).

night of the 23d-24th they sought to discover where he had gone. He did not reappear on the following morning, and all they could learn was that two wayfarers had seen him at three o'clock in a precipitous and somewhat dangerous part of the mountains. An active search was set on foot; not only the police, but soldiers from a regiment near explored the district without result. The local papers and also those of Paris mentioned the disappearance of M. Cordier, and the family offered a reward of 5,000 francs for the discovery of the body. Assiduous and persistent search was made from the 23d of September to the 7th of October. On that day the brother of M. Cordier wrote to Dr. Osty, asking him to submit the case to some somnambulist. Dr. Osty knew only by telegram the conditions under which M. Cordier had disappeared. The clothes usually worn by M. Cordier were sent him, and of these he took only a stocking-suspender, and without giving the least indication of the person and his disappearance, placed it in the hands of Mme. M., she being in (magnetic) sleep. Mme. M. said at once that this person, whom she described fairly correctly, had been in the mountains, that he had in his hand some tufts of grass, that he had fallen into a ravine that she described, mentioning a lake and giving some other indications.

Further and more precise indications were given on the 8th, and on the 9th, thanks to the descriptions given by Mme. M. to Dr. Osty, and sent by him to M. Cordier's brother, the body of M. Nicholas Cordier was found. Other very precise details were given that I cannot mention here. It is sufficient to say that it is *absolutely impossible* that Mme. M. should have become aware by any normal means: (1) that M. Cordier was in question; (2) that he had been in the mountains, and (3) of the exact place in which he had fallen.

The reward of 5,000 francs was not considered due, since the actual finding of the body was by the family. I do not know if Mme. M., who would seem to have had some right to it, received the money.

M. Suhr quotes the case of a Mr. Ballé, magnetized by Hansen, a barrister of Copenhagen, who travelled (in imagination) to find the mother of M. Suhr at Roeskilde. Ballé saw her slightly indisposed in bed, in a street named Skromerstrade. M. Suhr considered this a double error, but it was proved that his mother, against all anticipation, was actually ill in the street designated.

Ballé had never been to Roeskilde. Two other instances of clairvoyance were given by M. Ballé (*P. S. P. R.*, 1892, vii, 366).

A fine example of somnambulic cryptesthesia is reported to me by Mme. D., a lady of high character and great intelligence. For the first time in her life, she went with her daughter, Mme. R., to consult a somnambulist (who did not know her name), on a theft made from her. The somnambulist said to her: "The person who entered your house used the name of a dead man; and what a man!—a true hero, extraordinarily brave, who did more than his duty; he sacrificed himself for another." This was perfectly correct, far beyond any chance: the son of Mme. D. had been mortally wounded at the Bois de Caillette in going, under a fierce bombardment, to the help of one of his wounded men. In 1919, on the anniversary of this deed, a certain person calling himself the friend of Marcel D., Mme. D.'s son, had introduced himself, and while waiting for the lady had robbed her of a picture, a Corot, which she valued highly. Curiously enough the thief had given his real name, and brought back the stolen picture on the following day.

During incidents of the "major spontaneous hypnotism" described by Charcot as showing the advent of an attack of hysteria, cryptesthesia and lucidity sometimes occur. The visions alleged in the lives of saints are mostly connected with their times of crisis or ecstasy whether the form these take is catalepsy, lethargy, or convulsions. The cases of demoniacs who speak in unknown tongues (?) and divine the thoughts of their interlocutors (?) would give us many instances; but the credulity of the witnesses deprives them of any scientific value.

In this connection a more recent observation is furnished by Dr. Fanton (*A. S. P.*, December, 1910). While at Marseilles, he received a letter from Mr. X., announcing his return to Geneva, where he lived. At the same time Dr. Fanton was called in by Mme. X., living at Marseilles, for a violent hystero-cataleptic attack. As soon as he entered Mme. X. said, "You were eating an omelet, and you said 'Not at home!'" which was true. She added, "My husband has sent you a telegram saying he is coming, but he will not arrive, for he has gone to sleep in the train."

Mme. X., however, could not have known anything (normally) about the omelet, nor the telegram, nor the singular fact (a premonition) that Mr. X. would be asleep in the train at Culoz.

I have reported a remarkable instance of lucidity in my own

experience that occurred long ago and impressed me very strongly at the time. While a young student at the Hôtel-Dieu Hospital I was in the habit of magnetizing a convalescent girl who was still an inmate. One day I took with me an American fellow-student who had never before been to the hospital, and I said to T., in her sleep, "Do you know my friend's name?" She began to laugh. Then I said, "Look, what is the first letter of his name?" She said, "There are five letters; the first is H, then E, I do not see the third, the fourth is R, and the fifth is N." My friend's name was Hearn (*Phant. of the Living,* 1886, ii, 665). I made experiments in sending some hypnotized subjects "travelling" as the old magnetizers did, and had some astonishing successes, especially with Alice.

She went to visit the house of a Mr. C. at Mans, a house not known to me, but very well known to Mr. P. Renouard, then present. She saw a walled garden and a swing (correct, but unknown to Mr. Renouard, for the swing had been placed there since he was last at Mans). She saw a clock with pillars which she described closely enough for me to make the rough sketch annexed, which may be compared with Fig. 3 of the actual clock in Mr. C.'s drawing-room.

On another day Alice described the house of Dr. P. Rondeau, then present. "Draperies over the mantelpiece, a clock, and, leaning on the wood, someone looking at the clock whose shoulder is visible. A large painting of a landscape; between the town and the sea something pointed, a tower, or the roof of a church. . . ." In fact, in M. Rondeau's country house which Alice could never have seen, there is a statue of Penelope whose shoulder is prominent, looking at the clock towards which her head is turned. The picture is a copy of one by Canaletti and represents Venice, the canal in the foreground, and behind it the church of San Giorgio Maggiore.

Some instances of lucidity came to me from Léonie B., though these were very few in the course of a large number of experiments.

One day Pierre Janet set her "travelling." In her hypnotic sleep she went to Paris to see me and M. Gibert who had left for Paris. On a sudden she said, "It is burning." P. Janet tried to calm her, she returned to sleep, but soon woke again, saying, "But, M. Janet, I assure you that it is burning."

In fact my laboratory in the Rue Vauquelin caught fire at six that morning, November 15th, and was burnt out.[1]

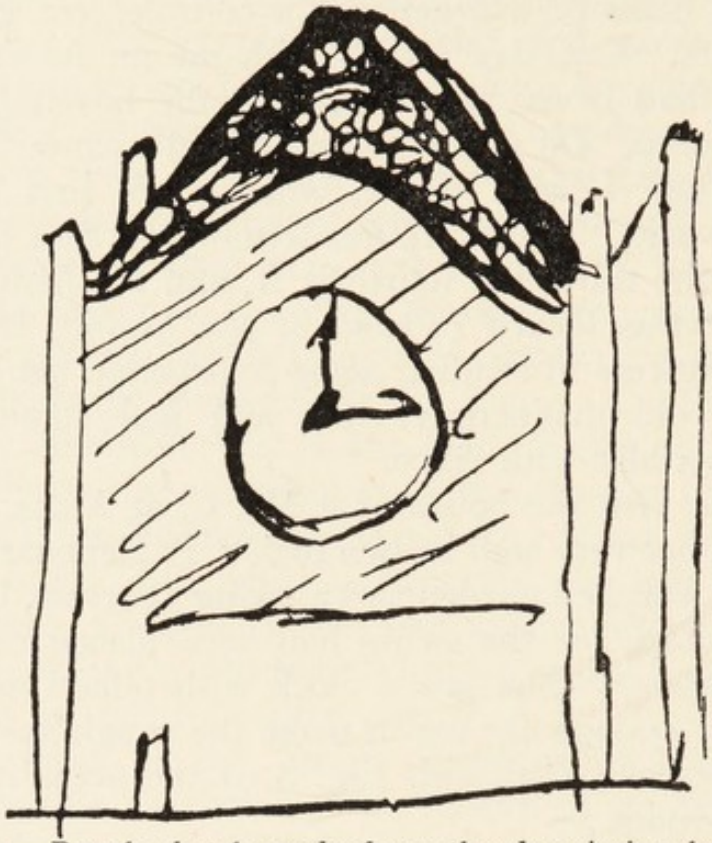


FIG. 2.—Rough sketch made from the description by Alice.

Léonie gave me one day a splendid example of lucidity, though it was accidental rather than experimental, and the details referred

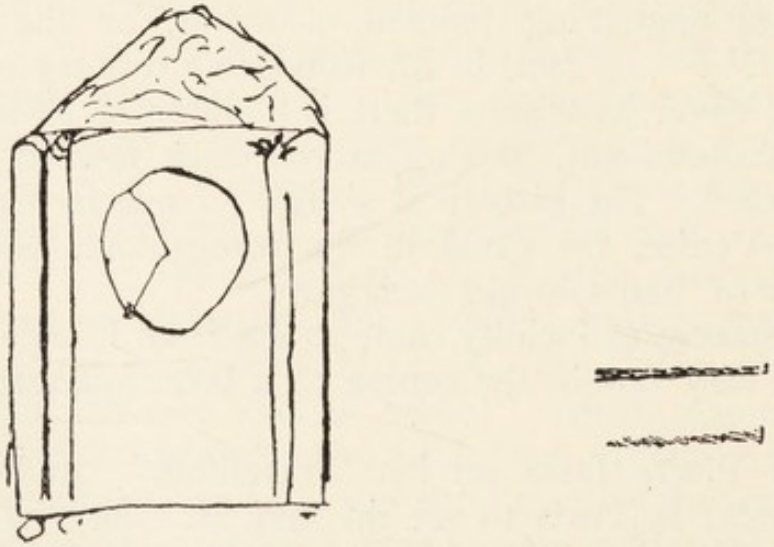


FIG. 3.—The clock in Mr. C.'s house as sketched by P. Renouard.

[1]There were two premonitions (or monitions, for the hour at which the dreams took place is not recorded). That night, between the 14th-15th of November, two of my most intimate friends, M. Ferrari and J. Héricourt, both dreamed, independently of each other, of flames and fire.

to quite unimportant facts. Experimenting with her one evening, without success, with cards and numbers, I spoke to her of my friend J. P. Langlois and said, "What has happened to him?" She at once said somewhat disrespectfully, "He has burnt his paw. Why is he not more careful in pouring out?" "Pouring out what?" "A red liquor in a little bottle . . . his skin has blistered at once." Nothing could have been more correct. Two hours before, J. P. Langlois, who was my chief laboratory assistant, in preparing some hypobromide of soda had poured out the bromine (the red liquor), too fast and some had gone on his hand and arm, making an extensive blister. Léonie could not have gone to the laboratory and no one had come from it to my house. I was then alone in Paris and had said nothing to any one about the accident that had happened two hours previously.

Dr. Backmann, of Kalmar, Sweden, observed a young girl, Alma L., who gave him many instances of lucidity in hypnotic sleep. One seems to indicate something more than lucidity. She was asked to go to the director-general of the pilot service at Stockholm, where she had never been. She saw the director sitting at his table, and described the room exactly. The order was then given her to take the bunch of keys that she had seen on the table and to place her hand on his shoulder to draw his attention. Alma declared that the director noticed her. Afterwards, the director, who had not the least suspicion that any experiment was being tried upon him, said that he was conscious of a strange feeling on the day and hour in question. He was busy at his table, when, without any kind of reason, his eyes fell on the bunch of keys near him on the table, which he was not accustomed to put there. He thought he saw a woman's form. Thinking it to be the housemaid, he took no notice. But, on the fact being repeated, he called (to her) and got up to see what was the matter. Neither the servant nor any other had been in his room. He heard no noise nor perceived any movement of the keys (*A. S. P.*, 1892, ii, 68).

A man having been arrested for murder, one of Dr. Backmann's subjects, Agda Olsen, described very exactly the house where the crime had been committed, and though she had never seen the murderer, said that he had a cicatrice on his right hand. The constable of Kalmar, Ljung, who had examined the accused, had not observed the cicatrice, and only after Dr. Backmann had told him did he verify the fact, resulting from an old abscess.

Alma having given notable proofs of lucidity I resolved to go to Kalmar with F. and A. Myers to make some experiments with her. The following is F. Myers' account; his acuteness and insight are well known (*Notes on a visit to Kalmar, A. S. P.*, 1892, ii, 160):

"M. Richet gave me a letter that he had just received of which I knew nothing, and went out of the room where Alma (hypnotized) was interrogated by Dr. Backmann. Alma said, 'The writer of this letter expresses a desire. It concerns something in metal; the thing can open and shut. There is some question of time and opportunity. It is some scientific matter that will be proved.' This was a letter from M. Tatin with whom I was then (April, 1891) experimenting on aëroplanes. The letter said, 'We tried the little machine, it kept turning to the same side. We had a satisfactory trial; the blades worked perfectly.'"

It goes without saying that I had never spoken of my attempts in aviation which (in 1871) I kept very secret.

Alma's answer is only a partial success, but it would be difficult to see in it mere coincidence. Alma, however, by reason of our presence was emotionally excited; when alone with Dr. Backmann she was perhaps more lucid. She once read the first letter of a word written by Dr. Kjelmann in the next room; another time, the word written being "Land," she said, "The first letter is M, the second A, the third R or N, and the word suggests the idea of springtime." This counts for very little, but in studying the fine examples of cryptesthesia by Mrs. Piper, it will be obvious that lucidity can carry much farther.

The proofs of lucidity given by reproduction or description of drawings enclosed in opaque envelopes are of profound interest; they have often led to remarkable results. But in such experiments more perhaps than in any others it is necessary to guard against two possible causes of error:

A. Unconscious assistance given to the lucid subject.

B. The possibility of chance coincidence.

A. When the hidden drawing is known, no sign whatever of approval or impatience must be given. This is very difficult. When the subject feels about, questions, and hesitates painfully for an hour, for two hours, or sometimes longer, one is tempted out of sheer pity to give some help in order that the experiment may succeed. It is, however, necessary to maintain rigid silence

and impassiveness. It is difficult to be absolutely mute and immobile. A disapproving silence may be maintained when the subject is off the track, or he may be encouraged to go on when he is not. I speak from long experience in saying that much care is needed to reach the glacial impassiveness that is required; thinking that those less habituated to experiment than myself may not all of them and always be able to maintain the impartial silence that is so necessary.

The best way to obtain unexceptionable results in experiments on lucidity is that the contents of the envelope should be unknown. Mental transmission is thus excluded and non-telepathic cryptesthesia is then the only explanation of a successful experiment. But as I have already said, mental transmission is only a particular case of lucidity and if success is more frequent with it than without it, that will often be because, knowing the answer to be given, the experimenter works less strictly.

B. Even when there is perfect agreement between the original and the reproduction the element of chance coincidence is not to be neglected.

For instance: I tried about 180 drawings on different persons with whom I was experimenting, and had in all about 20 successes, some of which were very striking.[1] Then, following out a series of mathematical combinations, I carried out 5,408 trials, in which chance alone was responsible for the association of any two drawings. The number of successes was 192, among which 10 were remarkable for identity between original and reproduction. Chance would give 3.5 successes per cent.; lucidity gave 12 per cent. The difference is noteworthy, but smaller than it would have appeared *à priori.*

It should also be observed that the calculus of probabilities is difficult to apply to the more or less exact reproduction of a drawing, for the criteria to be used must be decidedly arbitrary, whereas with cards or numbers, probabilities are easily estimated. I cannot, of course, reproduce here all the drawings, though that is almost necessary to a just appreciation of how difficult it is to estimate the element of chance in successes.

Alice, who is not a professional medium and has never been

[1] I do not give here the details of these, which will be found in the article published in the *P. S. P. R.*, 1888, xii, 18-168. *Relation de diverses expériences sur la transmission mentale, la lucidité, et autres phénomènes non explicables par les données scientifiques actuelles.*

hypnotized except by myself, has given me very good examples of lucidity.

One day at the house of M. Héricourt, having made the sketch of a photograph frame chosen by him (shown in Fig. 4), to be submitted to Alice by me she said: "It is a locket (*médaillon*), an oval in a frame, the head of a man. He has braid on his chest, it is high-necked; it can be closed. There are six or seven lines of braid. He is not bare-headed, but wears a military cap which has three stripes. There are four stripes on the lower part of the sleeve, round it. It is the picture of some one who is thin, perhaps seated. I recognize him, but I cannot say who he is."

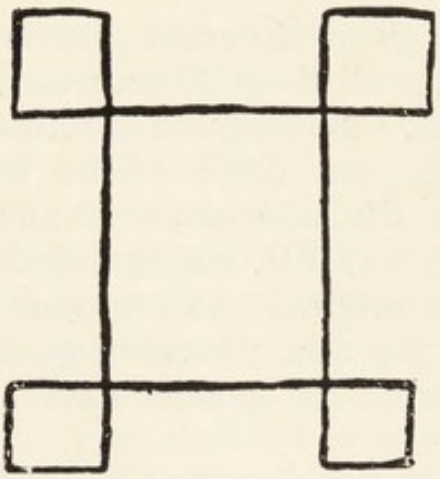


FIG. 4.

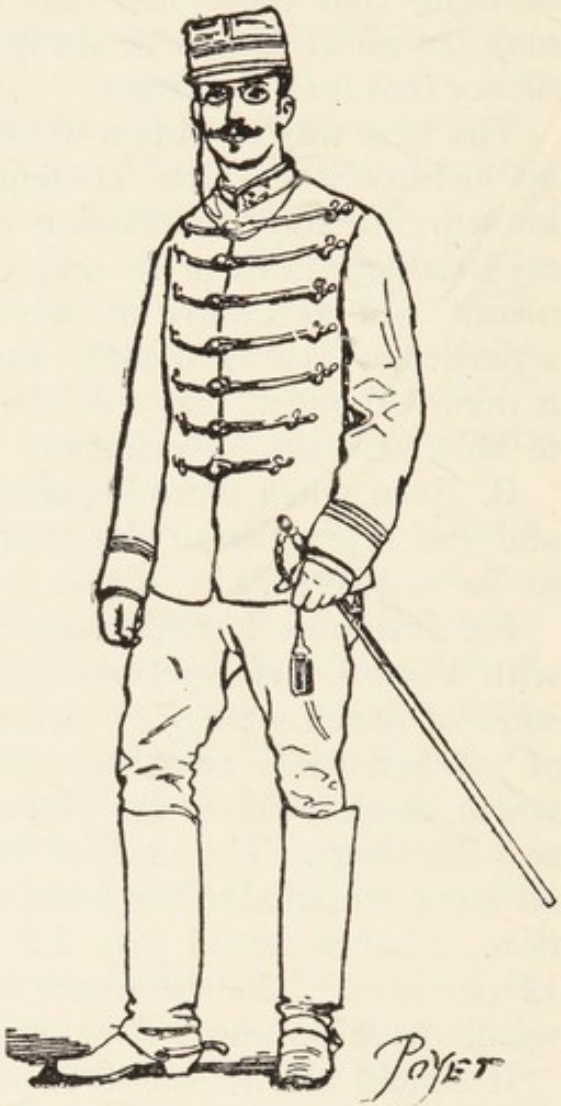


FIG. 5.

Representing the sketch of the frame containing the second (Fig. 5). Fig. 4 was placed in a thick sealed envelope. Alice saw Fig. 5, though this was not in the envelope, but was in the frame itself at M. Héricourt's house. There were therefore two distinct phases in the cryptesthesia.

The description accords with the photograph of which only the frame had been sketched and placed in the sealed envelope submitted to Alice. This photograph which Héricourt had under his eyes when sketching the frame is of himself in uniform. Alice had never seen him in this attire, and did not know he had been an officer. If an inference can be drawn it would favour

telepathy rather than lucidity. Alice seeing the former, thought in Héricourt's mind, but not the sketch in the envelope.

My eminent friend, Th. Ribot, editor of the *Revue Philosophique,* was present at another experiment with Alice. He brought a photograph in a thick envelope. I told Alice that it was the photograph of a town. She said, "It is not a street only; it is a general view of a town, a certain house is the most prominent object. It was this house that they wanted to take more than the rest; it dominates the rest. To get to the house one has to go upwards and turn round to the left." The photograph (of Toledo) agrees closely with the description.

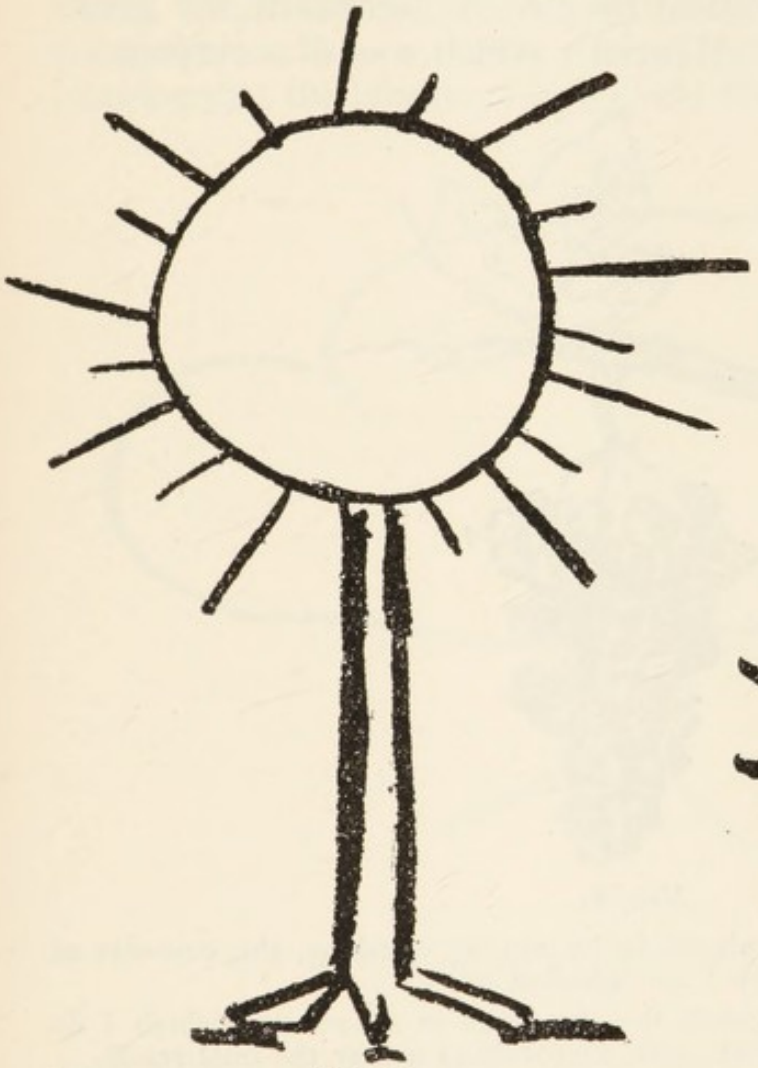


FIG. 6.

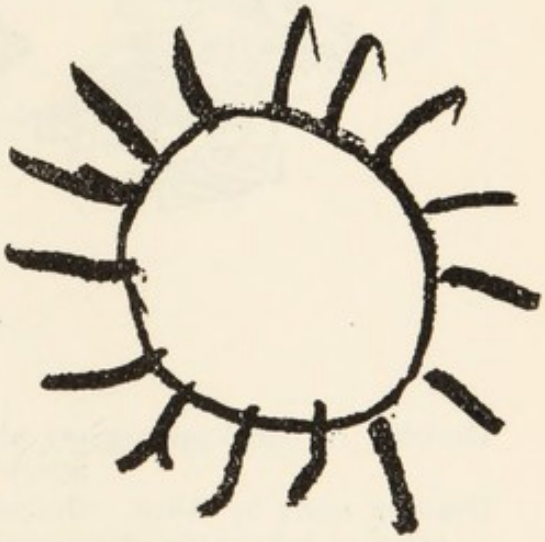


FIG. 7.

Sketch by Ferrari (Fig. 6) and reproduction by Alice (Fig. 7).

The sketch above (Fig. 6) was given me by H. Ferrari who was not present. I did not know what was in the envelope, which was taken at random from among twenty others. The experiment is faultless and the reproduction very good (Fig. 7). Comment is needless, except that the conditions being unexceptionable the result must be due to cryptesthesia or to chance.

M. Hanriot handed me a lightly made sketch on triple folded paper in a closed envelope. I was absolutely ignorant of the nature of the drawing. Alice gave a confused description, but her words aroused the idea of a serpent. She said, "Interlaced curves along a stem, like an anchor." I then thought of the imprint on the books published by d'A. A. Renouard, my great-grandfather, and drew it. Hanriot's sketch was of a serpent.

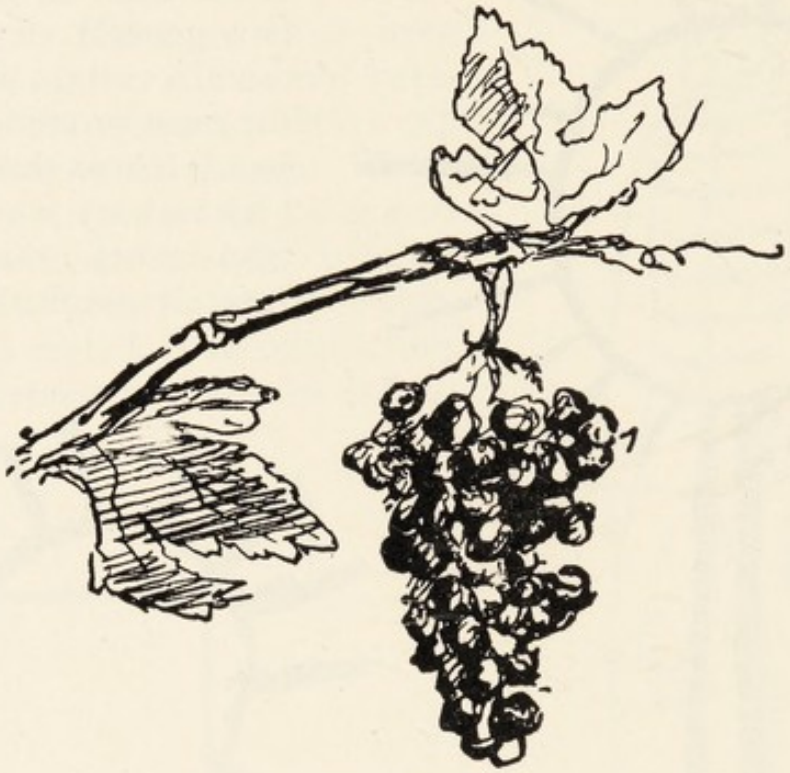


FIG. 8.

Drawing (a bunch of grapes) placed in an opaque envelope, the contents of which I am ignorant of.

Drawing made by Alice. She made five drawings in succession (which I do not give here, *brevitatis causa*), each approaching nearer the final result.

On January 24, 1888, I gave Alice three sketches unseen by myself:

(A) A sword; she drew two fencing foils, together.

(B) A drum; she said, "A hat."

(C) A hat; she did not reply.

Fig. 8 was presented to Alice in a thick envelope (contents unknown to me). She made five attempts, getting a little nearer each time, the last being Fig. 9.

Eugénie, a professional somnambulist who sometimes gave good instances of lucidity, said of another drawing, "It is a

horse's head, the small head of a sheep or an ox." The original was the head of a gazelle in outline.[1]

Further details would take up more space than this aspect of metapsychic phenomena warrants.

These experiments with Eugénie and Alice are of special interest, for in them there is no question of telepathy or mental transmission; it is a matter of cryptesthesia. Even if one could imagine that the luminous rays could filter through opaque bodies,

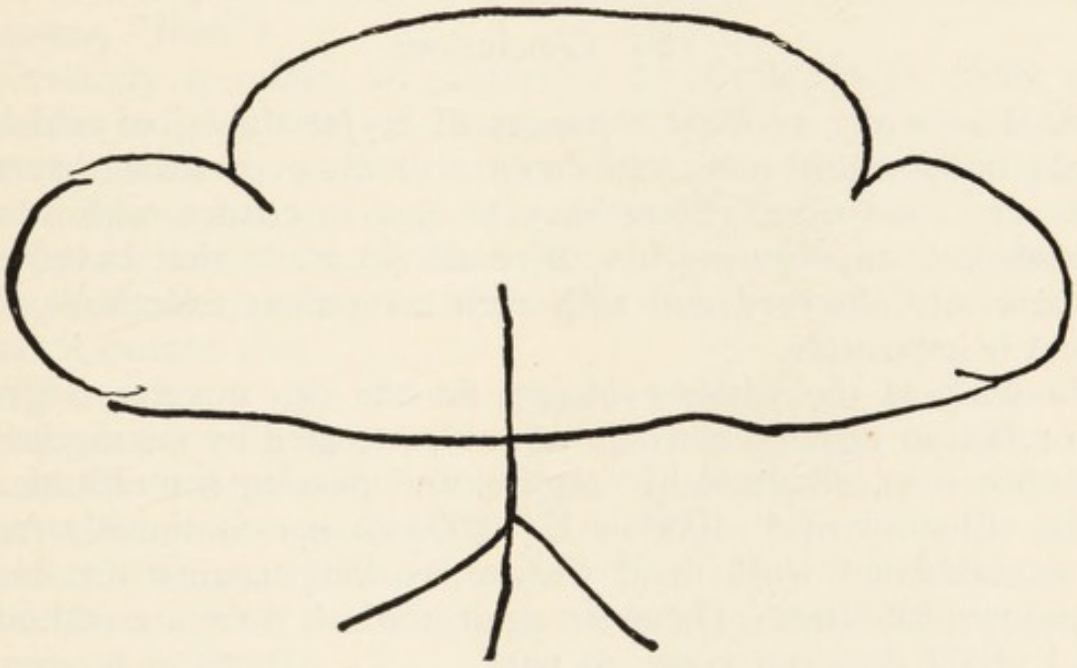


FIG. 9.

Last drawing given by Alice for the bunch of grapes.

such retinal hyperesthesia would be a modality of cryptesthesia. I will close this part of the subject with six examples:

Sketch in closed envelope.	*Description.*
A table.	An oval and a stick (Eugénie).
An anchor.	A sword with cross handle (Eugénie).
A bottle.	A bird with head and neck (Eugénie).
Knave of hearts.	A Maltese cross (Alice).
A sword.	Foils (Alice).
A hat and drum.	A hat (Alice).

[1] *Experiments in Thought Transference, P. S. P. R.*, 1888, xii, 169-216.

Messrs. Schmoll and Mabire made one hundred and twenty-one trials with drawings, apparently under less exacting conditions, since the guesser was surrounded by persons who all knew the design to be reproduced by mental vision. Moreover, the sketch was not in a closed envelope, the paper being open, though the back of the subject was turned to it and the eyes closed. The results were occasionally very good; there were six very striking successes in the one hundred and twenty-one trials. This is beyond the limits of chance, though not very greatly.

(b) Conclusions

A close study of these instances of cryptesthesia, of which I could quote many more, no doubt will discover some that are not very conclusive. Some may be due to chance, and others to defective experiment; but there are so many that have been so carefully observed and with such scrupulous exactitude that doubt is impossible.

Looking at the whole evidence, no one can imagine a great error lasting through a whole century, accepted by distinguished scientific men, admitted by sceptics, and passing a multitude of tests. Chances of 1 : 1000 or 1 : 10,000 do not continually recur in experimental work; and we are working against far more remote probabilities. The event against which there are real odds of 1 : 1000 does not come to pass.

It has not been sufficiently considered that in daily life improbable events rarely happen. We evolve in a connected series of small and very likely events. The visits I receive, the letters I write, the persons I meet, and the news given to me are very rarely improbable. Probable and likely events rule our lives. It is a simple truism to say so, nevertheless it must be said.

An inference must be drawn from this—we do not foresee the unlikely. Therefore when some unlikely event is indicated by monitory or premonitory cryptesthesia there must be a cause for it, and this cause is some unknown vibration received subconsciously.

To take a concrete instance among hundreds, Mr. Fraser Harris sees mentally his wife talking to a beggar who is holding a broom. This is an unlikely event of which he would not have thought unless something had conveyed this image to his brain. It is absurd to refer it to chance. The case is analogous

to a cord stretched across a road. If a bicyclist falls at that place no one would say that the fall was due to chance; it would, of course, be ascribed to the cord. There are no uncaused effects. When an unlikely event is foretold and duly comes to pass, that can only be due to cryptesthesia, for in the course of our lives, with but few exceptions, we do not foresee the improbable, and the improbable does not happen.

If I make an experiment on the atomic weight of silver and get 108.4 I do not attribute the result to chance. Why should I do so when, on asking Stella for the name of Mr. N.'s son, she answers, "Jean"?

Certainly it might be preferable to operate with cards and numbers only instead of drawings, travels, names, and sundry events, inasmuch as the former allow of exact calculation of probabilities; but we must take account of the fact that somnambulists do not readily lend themselves to this kind of experiment. M. Osty says that to do this is to require from lucidity what it cannot give.

When I try to get correct guesses of cards or numbers from Léonie I get only lamentable failures, perhaps because her will masks the indications of her cryptesthesia; whilst a fire in my laboratory or the accident to M. Langlois causes her to relate the fact very accurately (though I did not ask for either), with a precision whose probability is extremely small and cannot be expressed in figures.

The facts of lucidity are usually as unpredictable as the fall of an aërolite. With few exceptions one cannot count on success in a given experiment any more than one can foresee the fall of a meteor. Actual facts inaccessible to our normal senses are indicated, but unfortunately they are often not exact answers to exact questions. Somnambules and mediums do not give precise answers, though they state kindred facts that they could not have known by their normal senses.

It may be regrettable that one cannot use a hypnotized subject whose moral sensitiveness is very acute, like a calculating machine. To set them "travelling" interests them much more than the perception of an eight of spades. They are more interested in seeing a burning house, or a boat coming in, than in counting the number of black dots on a card. It may be unfortunate, but one must accept the conditions. The experiments are decisive; and taken by themselves are sufficient to establish that higher

and mysterious faculty of cognition that I have called cryptesthesia. Experiments with mediums confirm this much more strongly.

4. *Cryptesthesia Under Spiritist Conditions*

(a) Summary of the Facts

I call the form of experimental cryptesthesia manifested in spiritist circles, "spiritist cryptesthesia."

Spiritualism is a theory according to which the dead have not lost consciousness; the mind continues to exist as a spirit, and these spirits can enter into communication with mortals through mediums. As a definition, it may be said that the spiritist state is a psychological state such that the person experimented with, called a medium, and retaining (or not retaining) consciousness of his normal personality, makes movements (speech, writing, movements, or noises in a table, or motion of a planchette) which are not acts of his will. He claims that a personality other than himself acts on him and influences him.

This definition must not be taken to imply anything as to the reality of this extraneous personality. This will be examined later on in full detail. In the present chapter we shall only indicate its results from the point of view of cryptesthesia, without discussing their mechanism.

In other words, we shall seek to discover whether, in experiments to that end, mediums are able by any procedure to reveal or indicate facts that normal human intelligence could not be acquainted with; that is, cryptesthesia.

It is a minor matter whether the fact of supernormal cognition is manifested by raps, automatically written messages, by direct writing, by voices heard, or by words spoken, provided that the bare fact itself be duly proved. Now this fact has been established by so many unquestionable proofs that it is surprising that it should have been disputed or denied. Indeed, those who deny it are those who have neither experimented, nor read, nor studied, nor thought. Cryptesthesia which has been shown to be probable, by experiments on normal persons, and extremely probable, by experiments on hypnotized persons, becomes dazzlingly evident when it is studied under its spiritist modalities.

Richard Hodgson, summing up his experiences with Mrs. Piper, says that he brought at least fifty persons that he knew

to be strangers to her and took every possible precaution to prevent her obtaining any particulars about them. In most cases facts were alleged that could not have been known to Mrs. Piper; and he even employed detectives to make sure.[1]

In studying the accounts of her innumerable séances, we find that over two hundred names have been given correctly; they cannot, obviously, be given even in summary. Unless we imagine the monstrous absurdity of bad faith or imbecility on the part of Mr. Hodgson and Professor Hyslop, the cryptesthesia of Mrs. Piper must be considered to have been demonstrated two hundred times.

A whole volume would be required to sum up Hodgson's accounts, and after reading them it is impossible to doubt the fact of cryptesthesia, and even if this is generally of the telepathic type (for the answers to the questions put were known to the questioner), this is not always the case, as for instance when Mr. Thaw took her some hair in a paper and Mrs. Piper stated it to be a religious object; which was true, Mr. Thaw having made a mistake in the thing chosen.

If Florence Cook, D. D. Home, and Eusapia are the most remarkable mediums for objective phenomena, Mrs. Piper is certainly first among all those who have shown subjective ones. R. Hodgson, William James, J. Hyslop, P. Bourget, F. Myers, Mrs. Verrall, and Sir Oliver Lodge, after many séances, formally testified to her telepathic powers.

Myers says: "Facts personal to myself and accessible by printed records, collusion, or enquiry (though I do not think any of these methods were used), were not stated more frequently than others; messages were given me as coming from a friend many years deceased, and certain circumstances were indicated that Mrs. Piper could not have known. I know some facts that were suppressed as being of too intimate a nature, and the statement of one or two such facts is more convincing of supernormal cognition than giving dozens of names that the consultant could have no motive to suppress. All observers will agree that many of the facts stated could not have been dis-

[1]My personal evidence does not count among such very numerous testimonies, but I may be permitted to say that in the only experiment that I made with Mrs. Piper, whom I saw but once, she named a little dog "Dick" that I had in my childhood; a name that could not have reached her by normal channels. She made several errors before hitting on the name.

covered even by a practiced detective and others could have become known only by great outlay of time and money."

"I am as absolutely certain," says William James, "as I am of any personal fact, that Mrs. Piper knows in trance things she could not have known in her waking state."

Sir Oliver Lodge says: "In introducing anonymous strangers and questioning her myself in various ways, I am certain that many particulars that she gives in trance are not acquired by ordinary means. She can diagnose disease, and describe the present or former possessors of small objects under conditions that exclude the use of the normal senses."

The following instances are given by Sir Oliver:

Professor Gonner was introduced by him under an assumed name; she spoke of his Uncle William as having died through a wound in the head. This uncle had been killed in an electoral riot by a stone striking him on the head, before Professor Gonner was born.

"My wife's father," says Lodge, "died in a dramatic and affecting manner when she was fifteen days old. Phinuit gave a thrilling account of the circumstances of this death. The statement of the death of her father-in-law by a fall into the hold of his ship was also correct."

A Liverpool doctor slightly known to Sir Oliver and Lady Lodge was presented under the name of Dr. Jones. Mrs. Piper spoke to him of one of his daughters, whom she named as Daisy, as being pretty but ailing; and added, "There is a woman named Kate by her, whom you call Kitty." Daisy is pretty, but deaf, and the children's nurse is named Kate.

A stenographer brought to the séance to take down Mrs. Piper's words was called apart by Phinuit and told that he had a cousin called Charley; he added, "There are six children in your family, four boys and two girls; you have a sister Minnie; and you are called Ed." All which was correct.

Mrs. Piper recalls events long past, referring to the parents and grandparents of her questioners, events often needing long enquiries for their verification. One of the brothers of Lodge's father had a twin brother whose name was given by Mrs. Piper as Jerry (Jeremiah); she also named the other twin, Robert; she said that he was blind (correct), and that when a child he had a serpent's skin in his possession, a fact that happened sixty-six years before, and of which Sir Oliver was ignorant, but which

he found to be true. She spoke also of Jerry having swum a creek; this also was true.

In one of the earlier séances Mrs. Piper had sat down on a certain sofa. Phinuit, touching this sofa, said that it had been a gift from Aunt Annie, who had a son, Charley. Annie, speaking by Phinuit, said, "I am sorry that Charley should have eaten that bird; it made him ill." All the above was correct, and at that very time Charley, being in Canada, had shot a water-hen, had eaten it, and been ill some days after.

The first communications of George Pelham through Mrs. Piper are important, alike as evidence of cryptesthesia and for the possibility of identifying him. I will summarize them.

In the presence of R. Hodgson, Mr. Hart, a friend of George Pelham, deceased, received circumstantial details on the acts and words of G. P. George Pelham (a pseudonym for Robinson) told Hart, by the voice of Mrs. Piper, that Hart's sleeve-links had belonged to G. P. He gave the names of Mr. and Mrs. Howard, friends of G. P., and the name of their daughter Kalérine, and added, "Tell her, so that she may recognize me, that I will solve the Kalérine problems." Mr. Hart, not understanding these words, went to the Howard family (which Mrs. Piper did not know), and from them he learned that on the last occasion that G. P. saw Kalérine, a young girl of fifteen, he had spoken to her of God, eternity, time, and space; and said that one day he would tell her more.

After this séance the Howards had other meetings with Mrs. Piper. "The matters treated of," says Hodgson, "were characteristic, highly intimate, and personal. Mutual friends were named. The Howards, who took no interest in psychical research, became convinced that they had really spoken with the personality of the friend they had known for so many years."

After Hodgson's death another able and conscientious American psychologist, James Hyslop, the general secretary of the American Society for Psychical Research, who died in June, 1920, studied Mrs. Piper. Her "guide" was then Hodgson himself, and the evidences of cryptesthesia were startling.

Hyslop, having asked her concerning his own father, received from Mrs. Piper many correct particulars. She stated where he had left his spectacles when he died; she spoke of his books, of a cap knitted for him, and of a pocket-knife with a brown handle with which he used to pare his nails. She mentioned

divers walking-sticks that he had possessed, naming one with a ring, another with a gilt scarab, and one with a bent handle that had been broken; details of which all were correct and of which Hyslop had no knowledge, not consciously at any rate.

Mrs. X. introduced herself as Margaret Brown, and brought with her three locks of hair, *x*, *b*, and *s*, knowing only the origin of *s*. Of the lock *x* Mrs. Piper said, "It is from Fred . . . Imogen? Who is Imogen?" This lock was in fact from Imogen Garnay, which Mr. Fred Day had cut to give to Margaret Brown. Of the lock *b* Mrs. Piper said, "This belongs to some one who is very ill." In fact the owner of the lock died within the year. Of the lock *s* she said, "She is niggardly of her hair; she is your mother, she has four children, two boys and two girls." This was correct, and Margaret had cut off the lock of hair by a trick (Bozzano, *A. S. P.*, 1906, xvi, 546).

Hodgson, in a séance with Mrs. Piper, received a message from Eliza who claimed to have helped Mr. F. at his death. Mr. F. had died the day before, and his death had been announced in the Boston papers. Two or three days later Hodgson learned that at the time of his death, Mr. F. had said that he saw Eliza who was calling him. Mrs. Piper did not know Eliza (*A. S. P.*, 1909, xix, 107).

A curious fact is the admixture of personalities. It would seem (though this is doubtless a symbolization), that when any person—Phinuit, Hyslop senior, or George Pelham—cannot give certain particulars, he appeals to some person better informed. Professor Newbold gives a Greek phrase. Mrs. Piper knows no Greek, but George Pelham says, "I will ask Stainton Moses, who is a Hellenist," and shortly after the translation is given. Another time Rector and Hodgson, speaking by Mrs. Piper, cannot give the name of Robert Hyslop's mother-in-law. They "leave the machine," according to Mrs. Piper's picturesque phrase; that is, there is a short silence, then George Pelham returns and says, "She was called Margaret." But it is difficult to believe in the reality of these personifications in the spirit world who seek each other out and give information.

The curious case of Hannah Wild, analyzed by Mr. Sage, is a good example of telepathy coincident with complete absence of knowledge of facts known only to the deceased person. Mrs. Blodgett interrogates Mrs. Piper and gets an answer from her sister (Hannah Wild), two years deceased. Now Hannah Wild

had written a letter in which were some words that no one could understand. Mrs. Piper could say nothing about this letter, though the thoughts and secret acts of Mrs. Blodgett were correctly stated; so that this experiment, so unsatisfactory as to personal survival, was excellent for telepathy and cryptesthesia.[1]

Mrs. Verrall, an acute observer, obtained some good results. Mrs. Piper said to her, "Your grandfather was paralyzed; he had a sister called Suzanne, and a son, Henry. This uncle married a relation, a lady named Keley." Mrs. Verrall, who was not familiar with that branch of her family, made careful enquiries and found the facts to be as stated (Hyslop, *Science and a Future Life,* Boston, 1905, 157).

Paul Bourget, enquiring of Mrs. Piper (in the character of Phinuit), showed her a small travelling clock. Mrs. Piper was able to say to whom the clock had belonged, his way of life, and the mode of his death (suicide by poison). "She described with remarkable accuracy the flat I occupied in Paris, mentioning the storey and an inner staircase. She saw on the wall an object that she described, and on the mantelpiece a portrait that she thought to be that of a young man; it is of a girl whose hair has been cut short" (*A. S. P.,* 1895, v, 72).

Mr. Hyslop, speaking to his father through Mrs. Piper, asked for news of Mr. H. C. The reply was that "H. C. is preoccupied about the church and its organ." Hyslop was unaware that H. C. had ceased to attend the church because an organ had been placed therein, of which he disapproved (Hyslop, *loc. cit.,* 222).

Mr. Vernon Briggs, who had been in Honolulu, enquiring of Mrs. Piper concerning a little native boy, Kalua, that he had brought to America, received from her two words in the native language—*lei* (a garland of flowers), and *aloka* (salutations). When Mr. Briggs asked which island Kalua lived on she said *Tawaï,* but her hand wrote *Kawaï.* Now the name is correctly written as *Kawaï,* but is pronounced *Tawaï* by the natives.

For Mrs. M., a widow, Mrs. Piper wrote the names *Brown* and *Parker,* these being the names of the doctor and nurse who attended Mr. M. in his last illness. "I was then addressed," says

[1]If the original text contained in the bulky volumes of the S. P. R. and the Am. S. P. R. in which Hodgson and Hyslop have recorded their studies of Mrs. Piper are not available, sufficient information can be obtained from M. Sage's book, *Madame Piper,* fourth edition, Paris, Leymarie, 1902. It is very readable.

Mrs. M., "as only my husband could have addressed me, mentioning matters that concerned him and that I alone knew. An intimate friend of his was also named. He alluded to our last walk in the park at T., and answered the question I put to him when he was dying, and too feeble to speak. This answer was made in a way that Mr. Hodgson or any stranger would not have understood, but it was quite clear to me" (*Science and a Future Life,* 1905, 179).

Mrs. William James and her brother were told by Phinuit at a séance with Mrs. Piper, that their Aunt Kate had died at two or two-thirty A.M. that morning, and that they would receive a letter or telegram to that effect. During the morning a telegram arrived to say that Kate had died a few minutes after midnight.

I could multiply such instances related by skilful observers with minute care. The fact of cryptesthesia is undeniable. Mrs. Piper's gift is amply sufficient to prove the existence of this mysterious power of the mind. We can now go forward, and from hundreds of examples given by other mediums, select some in corroboration.

Those who wish to make a detailed study of these highly instructive phenomena are referred to the Proceedings of the American and the English Societies for Psychical Research, but a good notion of them can be obtained from the works of Myers, Lodge, and Hyslop.

Hyslop divides the lucidity of Mrs. Piper into three stages: (1) First report of Hodgson; (2) second report of Hodgson; (3) report of Hyslop. Already, after Hodgson's first report, when George Pelham had not yet appeared but only Phinuit, Hodgson said, "The very complex and suggestive results establish that names and incidents unknown to those present are indicated. This excludes telepathy as the sole cause of these phenomena." After the second report most of those who assisted at these séances had acquired "indubitable evidence" of supernormal action. Hyslop and Lodge appear to have come to the same conclusion.

It is true that some scientists who had only a few séances—Weir Mitchell, James Mark Baldwin, Professor Trowbridge, and Professor Eliot Norton—were not convinced. I shall venture to remind them that in so difficult a matter no conclusion can be drawn, one way or the other, unless after a long series of

experiments. They did not continue their studies of Mrs. Piper, which was a mistake on their part.

Hyslop, replying to Podmore, made a minute calculation of probabilities as applied to Mrs. Piper's cryptesthesia.[1] He was easily able to show that the probability of success due to chance alone is exceedingly small, denoted by some such number as $(\frac{1}{10}^1)^{47}$. Now it has already been stated more than once that the calculus of probabilities, correctly used, is an admirable check provided that the experiments are well performed; and the experiments by Hyslop seem to have been unexceptionable.

To supply data for the calculation Hyslop conceived the ingenious idea of asking a large number of persons the same questions that he put to Mrs. Piper, comparing these answers of non-sensitives with those given by her. He selected one hundred and five questions which Mrs. Piper had answered correctly, and rightly concluding that the answers by non-sensitives were due to chance alone, he reached the enormous figure of a probability of $(\frac{1}{10})^{147}$.

To give an example of his method, I quote question 46:

Has your father travelled in the West?

(*a*) Was he then in a railway accident?
(*b*) Was he injured by it?
(*c*) Was your mother-in-law with him?
(*d*) Did the accident take place on a bridge?
(*e*) Is it some time since the accident took place?
(*f*) Was he ill in consequence of the accident?

Out of 420 persons, 105 answered the general question affirmatively, 10 had been in a railway accident, one of these only, on a bridge. None of the 420 answered "Yes" to all the questions, so that the probability is certainly less than 1 : 420; but on the separate probability of each question, compounded for the whole, the figures come out as odds of 1 to 2,500,000,000; which amounts to moral certainty that chance could not have produced Mrs. Piper's results. The method that I employed with Stella is simpler, but leads to the same conclusion—the results cannot be explained by chance if the conditions of experiment are strict, as I believe both mine and Hyslop's to have been.

William James relates (*Am. S. P. R.*, 1909, iii, 470) some experiments made with Mrs. Piper that seem to him to be

[1] *Chance coincidence and guessing in a mediumistic experiment* (*Proc. Am. S. P. R.*, August, 1919, xiii, 1-89).

proofs not only of lucidity but of survival, these having to do with R. Hodgson deceased speaking through Mrs. Piper. He cites the following fact: "There is a person named Child, who has suddenly come, and sends his love to William (William James), and to his own wife who is living. He says L . . ." Such were the words of Mrs. Piper to Miss Robbins. Now neither Mrs. Piper nor Miss Robbins knew Child (deceased), who had been a most intimate friend of William James. Mrs. Child's Christian name begins with L. And William James concludes that the facts are "unquestionably supernormal."

Even the most sceptical must be moved by the consensus of such men as Myers, Oliver Lodge, William James, R. Hodgson, and J. Hyslop, who have all, after enquiries lasting over twenty years, agreed in recognizing the lucidity of Mrs. Piper.

Although these experiments with Mrs. Piper demonstrate cryptesthesia quite conclusively they do not really demonstrate survival.

No doubt the personalities that present themselves—Hodgson, Hyslop (senior), Phinuit, George Pelham, Stainton Moses, and F. Myers—showed impressive traits of psychological individuality, and kept them distinctly in writing, voice, style, and thought. But can this be considered sufficient proof? The factitious personalities like the Marie Antoinette of Helen Smith show the same.

And another conclusion follows: Since survival is not established with so powerful a medium as Mrs. Piper, so superior to other mediums, still less can it be established by other mediums. But there is no need to be disturbed; each period has its own tasks. Ours today is to establish the real existence of a faculty of supernormal cognition—cryptesthesia; and Mrs. Piper is unquestionably the one among all others who has given the most numerous, striking, and decisive proofs of it.

Not only do the experiments with her prove the supernormal faculty, but they show that telepathy is not a satisfactory explanation. It is clairvoyance—lucidity—the knowledge of facts that no living person knows.

Although D. D. Home was chiefly known by his objective mediumship, he gave striking proofs of lucidity. At Hartford, to visitors whom he saw for the first time, he spoke of a little woman dressed in grey silk that he had half seen who seemed to be a phantom, since she disappeared. Home then heard a voice saying to him, "It displeases me that another coffin has

been placed over mine. I will not allow this." He did not understand this enigmatic sentence, but next day when a visit was made to the tomb of the lady in grey the guardian of the cemetery, on putting the key into the lock of the vault, said, "Forgive me, but as there was a little space over the lady's coffin, we put that of the child of L. there; we had no time to notify you."

Miss Andrews, a non-professional, but very lucid, received in Home's presence a visit from Mr. Colley Grattam, a distinguished author and consul at Antwerp and Boston. He was disposed to laugh at spiritualism. "Do not laugh," said Miss Andrews, "you have a spirit who calls herself Emma, standing at your side." "What do you know of her?" said Mr. Colley Grattam, visibly disturbed. "She watches over you to protect you, for you were good to her. On a stormy night you took her in and gave her hot wine; you reproached her husband for his cowardly and inhuman conduct." "Yes," said Grattam, "the brute deserved to be hanged, though he was a member of Parliament. Adieu, I can hear no more, but I will never laugh at this again" (Home, *Light and Darkness,* 1883).

Mr. Britton, a well-known writer, relates an experience with Home at Greenfield: Unusually loud raps were made on the table for Mr. Britton, giving the message, "You are wanted at home; your child is very ill. Go at once, or you will be too late." "Then," said Mr. Britton, "I took my handbag and went. In the street I heard the whistle of the engine of the last train. Running as hard as I could, I just caught it, gripping the last carriage as it moved, and on arriving at home I found the facts as stated."

Hyslop made some experiments, interesting though less brilliant than those with Mrs. Piper, with Mrs. X., who is not a professional medium. He gave his name as Robert Brown. On seeing him Mrs. X. called him James H., saying that Robert was not his real name but that of his brother. She also gave "Mary" as the name of Hyslop's wife, then deceased (Hyslop, *Science and a Future Life,* Boston, 1905, 255).

Prince Wittgenstein learned through a medium's message that the will of his friend General v. Korff, some months dead, would be found in a particular cupboard of the house where he died. This will had been sought in vain, but on the arrival of Prince Wittgenstein's letter it had just been found where stated (*A. S. P.,* 1910, xx, 120).

Mr. Hereward Carrington tells the following: The father of

an English soldier, killed at Beaumont, after reading Sir Oliver Lodge's *Raymond,* decided to visit a medium—Mr. Vout Peters —to whom he did not give his name. Peters gave him at once four names—John, Elisabeth, William, and Edward. These were the names of his father, his mother, his brother, and a nephew long dead. He told him that his dead son was called Po. . r. The son's name was Roger, but the curious fact is that he was familiarly called called Poger and not Roger (*Psychical Phenomena and the War,* New York, 1919, 272).

Mrs. X. thought she had seen the phantom of her son one morning in full daylight; she went the same day to consult Mrs. Annie Brittain who said, "Your son tells me to say that if you saw him, it was himself and not a dream, and that Jeanne saw him too." This girl Jeanne, who did not know Mrs. Brittain, had also seen the apparition.

Captain James Burton, writing automatically to communicate with his deceased father, said, "I did not know that my mother, who lived about sixty miles away, had lost the dog that my father had given her. That same night I received a communication from him telling me of my mother's trouble. An intimate secret known only to him and to my mother concerning a matter that occurred some months before my birth was revealed to me, with the instruction, 'Tell this to your mother and she will know that it is I, your father, who is writing.' When I told her this she, who till then was sceptical, fainted" (*The New Revelation,* by Conan Doyle).

It is to be noted that Captain Burton's automatic writing is so small as to need a lens to read it.

De Vesme relates the following incident which acted on him so strongly as to decide him to devote himself to occult science. The narrator was Albert de N., who saw it at Rome.

One night, in 1871, his mother began to shriek aloud. Young Albert and his father hurried to her, and found her on the ground terror-stricken: she said that "spirits" had taken her out of her bed. The next morning at 7 o'clock there was a ring at the door. Colonel Baron Daviso, who was entirely unknown to Mr. and Mrs. de N., came to ask what had occurred, saying that at a spiritualist séance he had been told that *the spirits would play a trick* on a lady in that house, and he had come to ascertain the facts" (*A. S. P.,* 1909, xix, 109).

An incident of spiritist cryptesthesia obtained by table-tipping

was observed at Cambridge by Helen Verrall (*J. S. P. R.*, March, 1907, 36). On the 29th of January, at 6 P.M., the following words were dictated: "Fellow of Royal Society Potter, dead this afternoon, 4:30, Editor of Physiological Review London 43 Belsize Gardens Kensington, married, five children."

The message applied well enough to the eminent physiologist, Foster (not Potter) an F. R. S., married, the father of five children, who lived in London (the address is incorrect), who died in the night of the 28th, not at 4:30 on the 29th. The news only reached Cambridge late in the evening of the 29th by the London evening papers of that day; and Helen Verrall and Mr. Bayfield, who was at the table with her, had seen no one or looked at any paper. It is also to be noted that Mr. Michael Foster had been professor of physiology at Cambridge and, like Helen Verrall's father, belonged to that university.

I had several very clear experiments with Stella, a young lady who is not a professional medium and only took up spiritualism by chance. One day she found that on putting her hand on a table or planchette she obtained curious answers. She gave me striking examples of lucidity; I could not, however, decide whether this was telepathic or otherwise.

I made my experiments as strict as possible. In these experiments three persons were present—Stella, myself, and G., a B.Sc., and a skilful physician who had never seen Stella. I myself knew nothing at all of G.'s family. During these experiments not only did G. not touch the table, but he had his back turned to it, said no word, and made no sign. In the eight séances held, Stella gave the first names of G.'s wife, brothers, son, father, and father-in-law, names of which both Stella and I were entirely ignorant. Taking a probability of 1 : 40 based on there being about 40 usual Christian names of men and the same number for women, the odds against successful results by chance are $(\frac{1}{40})^6$; that is, 1 to 25,000,000,000, which is moral, if not mathematical, certainty.

The calculus of probabilities must be handled with caution, for it is not quite accurate to say that there were no failures, so that compounding failures with successes, the probability cannot be placed so high as $(\frac{1}{40})^6$. Exaggerating the failures, we will admit six hesitations equivalent to failures. Then according to the formula $\frac{S!}{\alpha!\,\beta!}\,p^{\alpha}\,q^{\beta}$, (see p. 57 *ante*), admitting six

failures and six successes, the compounded probability comes out as $\frac{1}{25,000,000}$ which is just as much moral certainty as if one thousand times greater. Some of these failures are themselves instructive: Thus, the name of G.'s child was asked for. The answer was "Georgette," which is wrong, for the child is a boy and is called Jean. Then G. told us that had the child been a girl, his wife and he had intended to call her Georgette, a fact that Stella and I of course did not know. G. asked the name of a brother, deceased. The answer was "André, but he is living." Now the name of the dead brother is not André, but there was a living brother André. This check is almost more interesting than a success.

Stella and I both knew that G. was born in Brittany, but nothing more. We asked the name of the town where he was born; the answer was *Loria.* We at once thought of Lorient; but in fact G. was born at Morlaix. As there is possible error between adjoining letters (by table-tipping to an alphabet), L may very well have been taken for M, and I for L. Although Stella and I were both convinced that the coming word should be *Lorient,* the fifth letter came as A in despite of us.

Stella was also able to give, through the table, the name of a childhood friend of G., and the word *Kerveguen*—the name of the house G. lived in at Morlaix. G. had just received a letter about his little son who was feverish. It was asked what the letter contained, these contents being unknown to us. The answer was "Jean, fever," and there was added, "laughs, carriage." Now G. had recently given to his son a little carriage with which the child had been greatly and unusually amused.

Various other proofs of lucidity were given me by Stella that I do not reproduce here, although they seem to me to carry proof, for I have only named those in which it was *strictly impossible* that she should, consciously or unconsciously, have been able to acquire her information by any normal means.

I will only cite two more facts:

1. I had taken a letter to my friend, Professor W. Stirling of Manchester, who had just come to Paris, and was at the Boulevard Saint-Michel. I had never mentioned Mr. Stirling before Stella. On the following day I said to her, "To whom have I been taking a letter at the Boulevard Saint-Michel?" She answered at once, "To your London friend." Nothing could have been more unlikely, for how could she suspect that among the

many letters I might have taken to that place this would be to an English friend of whose existence she knew nothing?

The following instance is even more extraordinary. I saw Stella on the 2d of December, during the day, and on leaving I said, "I am going to give a lecture on snake-poison." She at once replied, "I dreamt last night of snakes, or rather of eels." Then, without of course giving any reason, I asked her to tell me her dream, and her exact words were: "It was about eels more than snakes, two eels, for I could see their white shining bellies and their sticky skin; and I said to myself, 'I do not like these creatures, but it pains me when they are hurt.'" This dream was strangely conformable to what I had done the day before, December 1st. On that day I had, for the first time in twenty years, experimented with eels. Desiring to draw from them a little blood, I had put two eels on the table and their white, shining, iridescent, viscous bellies had particularly struck me. They had been fixed on the table for the removal of their hearts. I had certainly not spoken of this to Stella, whom I had not seen for some time, and she is not familiar with any one of the persons who frequent my laboratory.

I will here note, as characteristic of Stella's mediumship, and doubtless of that of many other sensitives, that she rarely gives a precise answer to a precise question. I had not asked her anything about what I had been doing on the previous day, and she had no idea that her dream had any reference to me. She only saw two eels. It is none the less a remarkable instance of cryptesthesia, for her words corresponded so well with the impression strongly made on my mind, that chance can have had nothing to do with the matter.

Lady Mabel Howard, writing automatically, was interrogated by one of her friends who had lost some jewelry. She wrote that it would be found under the bridge of Tebay, which seemed altogether unlikely. A month later it was discovered there (*P. S. P. R.*, ix, 44).

Miss A., a writing medium, gave to Lady Radnor the name of Anna Chambers. This name was entirely unknown to the family. After minute research, it was found, through the *Herald's* office, that a certain Lady Exeter, an ancestress of Lady Radnor, had been Anna Chambers prior to her marriage.

Mr. Gordigiani, a student at the military school at Florence, showed spontaneous mediumship from the age of fifteen. One

day in 1883, he being then seventeen years of age, an American lady, a widow named Mrs. B. M., was having her portrait painted by Signor Gordigiani, the young man's father, and expressed a desire to have a séance with the son. He wrote, "There is enmity that I do not understand between the lady and her deceased husband." When this, written in French, was translated to Mrs. B. M. she turned pale, stood up, and said, "What! Still?" Then as a more conciliatory reply was asked for, the inexorable writing answered, "Impossible, he is in Nigritie (? Nigeria). His mission is to influence the abolition of slavery. He is a negro."

Mrs. B. M. withdrew, very much moved, and the next day she said that her husband had been a coloured man, which had brought about a long estrangement between them (*A. S. P.*, 1898, viii, 261).

On Friday, October 3, 1906, at Naples, Zingaropoli, at 8 P.M. was in spiritualist séance with a young medium and Signor Marzorati, the editor of the excellent review, *Luce e Ombra*. During this séance the medium announced that a sub-lieutenant of infantry in the barracks at Piedigrotta, Guglielmo Paternostro, had been killed by a revolver shot. This was the fact, reported in the *Mattino* of Naples, October 4, 1906 (*A. S. P.*, 1906, xvi, 718).

Professor Feijao of Lisbon, in spiritist séances with Mme. Frondoni-Lacombe, received the name of his father by raps. He withdrew his hands from the table but continued to obtain clear and entirely correct replies to questions to which none of the persons present could have given answers.[1]

Dr. Moutin had attended Mme. Joubert in cholera. A few moments before her death, she cried out, "The mirror, the mirror!" pointing at a mirror on the mantelpiece. Her husband, a sailor, was absent. Dr. Moutin wrote the facts to him, and he knowing that the deceased often hid money, sought for it everywhere without success. Fifteen months later the spirit of Mme. Joubert stated at a séance to Dr. Moutin that a bond of the Fraissinet Company was hidden behind a mirror that M. Joubert had not examined, indicating its position. Dr. Moutin thereupon wrote to M. Joubert and the bond in question was found (Bozzano, *A. S. P.*, 1910, xx, 1222).

[1]Experiments with Mme. Frondoni are almost all concerned with objective metapsychics. They will be discussed more in detail later on.

Lady Mabel Howard gave Myers some good instances of clairvoyance. Myers had been invited to a certain lunch, concerning which Lady Mabel knew nothing, not even that it had taken place, but she said that six persons were then present and that the gentleman who sat next to Myers was called Mo.... There had been in fact six persons and Myers's neighbor was named Moultrie.

In another experiment it was asked, "Where is Don?" The pencil wrote, "Don is dead," which was true and unknown to anyone. Again, "Who is the best friend of a little girl who is there?" The answer was, "Mary," which was true. A book was found which had long been sought in vain.

The Tausch case, observed by Hyslop, proves surprising cryptesthesia. Mrs. Chenoweth (the pseudonym of Hyslop's medium), was interrogated on the subject of a certain German whose widow had written to Hyslop to get some communication from her deceased husband. Hyslop, without saying anything to Mrs. Chenoweth, obtained the name Taussh, Tauch, Taush; it was said that Taush knew William James, that he was a philosopher, that he was not in his home when he died, that he had a mania for putting watches to the correct time, that he had a bag in which he kept his spectacles and his manuscripts; minute details not accountable for by telepathy, but only by clairvoyance.

Mr. Isaac Funk, the well-known New York editor, experimenting with Mrs. Pepper, gave her a sealed letter in which he had written the word "Mother." Mrs. Pepper took the letter, gave the Christian name of Mr. Funk's mother, and said that she walked on one leg, adding, "Do you not remember that needle?" Mrs. Funk had run a needle into her foot. Mrs. Pepper also saw at the side of Mrs. Funk her grandson, "Chester." At the moment Mr. Funk could not remember the name, but, on enquiry, found that his mother had a little grandson of that name who had died twenty years before in a Western State (*A. S. P.*, 1905, xv, 246).

Yza Trisk, in a spiritist séance at Stockholm, received the following communication: "I left the earth twenty-four hours since, and I am come to thank you." There was also a mediumistic drawing which was recognized as the portrait of a Finnish poet whom all thought to be living. This poet, whom Yza Trisk knew slightly, the author of the Finnish national hymn, had just died in Italy. Is it established that at the time of this séance

no announcement had appeared in any Stockholm paper? (Bozzano, *A. S. P.*, 1910, 264).

Commandant Darget, accompanied by his wife and daughter, visited Mme. Bonnard, a professional medium, who spoke on that occasion as if she were Mme. Darget's mother. A proof of identity being asked for, it was said, "I am very glad to see that white flowers have been put on my grave." Now a cousin visiting Poitiers, where Mme. Darget's mother was interred, had placed white flowers on her tomb (Bozzano, *A. S. P.*, 1909, xix, 322).

W. Stead, in presence of Mrs. R., wrote automatically (nominally from Julia), that Mrs. R. had had a fall and injured her spine. Mrs. R. denied this, but Julia (by the hand of Stead) wrote, "She has forgotten; it was seven years ago at Streaton in Illinois; there was snow. On reaching Mrs. Buell's house, Mrs. R. slipped on the edge of the pavement, fell, and hurt her back." Then Mrs. R. remembered the incident, which she had completely forgotten (*A. S. P.*, 1909, xix, 110).

In 1874, Stainton Moses, having been magnetized by Du Potet, wrote automatically, "I killed myself today." The writing was accompanied by a very rough drawing, with the words, "Under the steam-roller in Baker Street where the medium passed by." The next day, after enquiry, Stainton Moses learned that a man had been crushed in Baker Street by the steam-roller (Delanne, *loc. cit.*, 34).

Mr. Mackenzie, though unaccustomed to shooting, spent a day in the shooting fields; in the evening playing two games of billiards with his father, winning both. On the same day Mr. Nicholson, who lived one hundred and twenty miles distant, and hardly knew Mr. Mackenzie, obtained through the table the name Mackenzie. "He plays billiards with his father and wins both games; he has been out shooting" (*A. S. P.*, 1919, xxix, No. 30).

Mrs. Effia Bathes was converted to metapsychism by the following entirely demonstrative fact: She went one day to a professional clairvoyant whom she did not know and who did not know her. The medium described to her a deceased brother, and he, speaking through the medium, said that he had been to his old home and was sad to find that his collection of fossils was no longer in his room. This brother, a student at Cambridge, had made a fine collection of fossils. After his death part of this collection had been given to the Cambridge museum; the rest

remained in his room. Some time later Mrs. Bathes learned that their mother had presented these to the museum at Bristol.

At Vilna, January 15, 1887, at the house of the engineer Kaigodoroff, Miss Emma Stramm, acting as the medium, said that Augustus Duvanel had died of a congestion of the blood. Then another communication was received announcing that this was not true, but that he had committed suicide at Zurich on the 15th of January, 1887. It appears that the father of Emma Stramm and also the guide who gave the table-messages both desired to spare Emma the pain of learning that the young man had committed suicide (by reason of disappointed love for Emma). This romantic story signifies nothing; and it is to be regretted that any serious work should take note of such tales.

An eminent physician, Dr. Santo-Liquido, director of the Office of Hygiene at Rome, has analyzed very ably the phenomena of cryptesthesia that he observed in a member of his own family —a distinguished lady—who without having desired them, presented the phenomena of raps and automatic writing. Signor Santo-Liquido, like all of us, was absolutely sceptical of so-called spiritist phenomena; but he had to give in to the evidence that mediums occasionally acquire knowledge that transcends the normal. One day, Louise (the medium), said to him in trance, "Instead of criticizing my experiments you would do better to occupy yourself with your report which is not completed." Santo-Liquido was absolutely convinced that this important report had been sent to the Minister of the Interior fifteen days before; but the following day he ascertained that through an incredible act of negligence by a subordinate, it had been left in the portfolio containing the case.

Many times Louise has correctly indicated unforeseen facts, and has also given many instances of cryptesthesia. Once she said to Signor Santo-Liquido, "You will be called to Genoa, but Signor Giolitti will not let you go." Both were unlikely, but the next day he was urgently called to Genoa by a member of his family, and at the same time received a telegram from the Premier that he must on no account leave Rome, as Signor Giolitti needed him.[1]

M. Tola Dorian, during a spiritist séance, learned that his friend H. de Lacretelle had just died in Paris, the phrasing being

[1]Communicated to the International Metapsychic Institute of Paris, and published in their bulletin No. 1 of 1920.

that he was discarnate. He had in fact died that night, February 16, 1899, at Paris, and not, as M. Dorian thought, at Mâcon (*A. S. P.*, xxix, 242).

Some instances of spiritist cryptesthesia are mentioned in M. Cornillier's book.[1] Unfortunately they are but few, and this book being devoted less to the demonstration of clairvoyance than to presenting the ideas of the subconscious on spiritualist theories, it is difficult to cite much from it with reference to lucidity. It is the story of a young girl, Reine X., aged fifteen, who, in a first spiritist experience, obtained raps without contact. She was then magnetized by M. Cornillier, and the subsequent phenomena (all subjective) occurred in a state of somnambulism. They must be classed as spiritist, for she had a "guide" (Vettellini?) who dictated her answers. It is, however, a small matter whether the classification is spiritist or somnambulist, for these two modalities are often admixed.

The first time that M. Cornillier magnetized Reine she went (in imagination) to M. Cornillier's room, which was separate from his studio, and into which she had never been, and described various details—some ivory brushes, an oval mirror, and two small portraits on the mantelpiece.

Another time she went to see M. S. O., a friend of M. Cornillier, whom she saw sitting at his desk writing a business letter; with a lady beside him in an armchair to the right of the desk. All this was correct; but what does it prove?

Reine, sent to see the house of M. X. at B. (he had died six years before), said that there was a very old tower (correct), and speaking of M. X., she said, "He likes to take long walks and to paint," both being characteristic of M. X.

She seems also to have had a premonition (p. 417). On the 26th of August, 1913, she "saw" M. Cornillier taking a train, dressed in black and looking sad, and this vision was repeated on the night of the 28th. On the 30th she "saw" M. C. packing his valise. On the 1st of September M. C. received news of the death of a cousin, and he took the train to be present at the funeral, wearing mourning. Unfortunately M. C. does not mention whether Reine might not have learned of the cousin's illness by normal means.

[1]P. E. Cornillier, *La survivance de l'âme, et son évolution après la mort, Comptes rendus d'expériences,* Paris, Alcan, 1920, 570 pp.

Reine was also able to give the name of a lady, Jeanne B., speaking through her (p. 504) who gave many correct particulars concerning her son, Marcel, a cavalry soldier, and of her husband, who had caused her much sorrow, and whom she had divorced. All these details were found true, but it is impossible to admit the certainty, or even the likelihood, of cryptesthesia, for we are not told that Reine could not have known Mme. B., who was a modiste.

All these facts have therefore very little weight; and despite the pains taken by M. Cornillier there is so much lacking in his book that we cannot build much upon it. The opinions of Vettellini (i.e., the subconsciousness of Reine), on this world and the other leave us very cold; the exact demonstration of the smallest fact of cryptesthesia or premonition would have a higher value. The valuable reports of Mrs. Sidgwick, R. Hodgson, and J. Hyslop are unexceptionable in this respect; and the admirable report by Sir Oliver Lodge of his séances with Mrs. Piper are models of what such reports should be.

M. Mamtchitch was present for the first time at a spiritist séance at Kieff in 1875. Returning home, he placed himself at the table and put questions by the alphabet. He got the name Palladia, and the words, "Put the angel back in its place, or it will fall." On the following morning he visited the cemetery, where he had never previously been, and found the tomb, buried in snow. The marble statue of an angel bearing a cross was leaning much to one side (Bozzano, *A. S. P.*, 1909, xix, 324).

Mr. Massey, interviewing Miss Lottie Fowler, a medium, gave her the glove of one of his friends, named Pigott, entirely unknown to Miss Fowler; she said, "It is very funny, I can get nothing but Pig, Pig" (Myers, *Human Personality*, ii, 562).

Sir William Barrett, quoted by Miss Dallas (*A. S. P.*, July, 1916, xxvi, 112), gives a fact of cryptesthesia by the wife of an eminent Irish doctor who had the faculty of automatic writing. She wrote the name of a cousin of hers killed in action and that he was betrothed to a lady whose full name and address were given. The engagement had been kept entirely secret even from the family of the deceased officer.

Dr. Speakman, experimenting with two young English ladies at Pau with a planchette, mentioned a Mrs. Sarah Lamy, who had died a few days previously. Sarah stated that her daughter's name was Rose (correct), and that she, Sarah, would manifest

her presence to her husband by rapping on the foot of the bed. That very evening Mr. Lamy heard raps on his bed. She added that there would be difficulties with the lawyers; and in fact unforeseen difficulties, which had nothing to do with Mrs. Lamy's death, did actually arise. There were other veridical announcements (*A. S. P.*, xix, 330).

Mrs. Leonard, who has given such admirable proofs of clairvoyance to Sir Oliver Lodge, gave also very good proofs of cryptesthesia to Miss Radclyffe Hall and Lady Troubridge.[1]

The memorandum is divided into five chapters.

1. A description of the communicator; i.e., of the person supposed to be speaking—a Mrs. A. V. B.—a friend of Miss R. H. and Lady T., who died aged fifty-seven years and was quite unknown to Mrs. Leonard. She was exactly described by Feda, Mrs. Leonard's guide. Sometimes Miss R. H. touched the table lightly, but the answers were mostly given verbally. Feda said that Mrs. A. V. B. was paralyzed on the right side of her mouth (correct), and the description of the lady was very exact.

2. Complete descriptions of places entirely unknown to Mrs. Leonard which had been visited by Miss R. H. and Mrs. A. V. B. during life; more especially Teneriffe and the Canary Islands. She spoke of two little monkeys, of a climate neither too hot nor too cold, of a path over cinders, and of a place named Cruth, Vera. Vera Cruth, Teneriffe, Mazagal. (Mrs. A. V. B. and Miss R. H. had visited Teneriffe, Santa Cruz, and Mazagra, in Morocco, together.)

3. Other proofs of strong lucidity were given, as to which the ladies can give no details, these being of too intimate a nature for publication. The house of Lady T., her dining-room, and her blue dressing-gown were exactly described.

4. Abundant details were given of "Daisy" (pseudonym) whom A. V. B. had known, details of which neither Miss R. H. nor Lady T. could be aware of.

Without entering into further circumstantial detail it is clear that Mrs. Leonard's cryptesthesia is very powerful, and, like Mrs. Piper, she has cognizance of facts that no mental transmission

[1]*On a series of sittings with Mrs. Osborne Leonard*, by Miss Radclyffe Hall and Lady Troubridge, *P. S. P. R.*, December, 1919, xxx, 339-547. Although confident of the medium's good faith, Miss R. H. and Lady T., who had never frequented spiritualist circles, employed detectives to make sure that no enquiries had been made by Mrs. Leonard.

can account for. These remarkable experiments prove once more that cryptesthesia is a real faculty that cannot be explained by invoking telepathy.

Mrs. Thompson gave some good instances of cryptesthesia to Myers and to some other persons. This manifests itself in a somnambulic state that comes on spontaneously when she wishes to make an experiment. Then Nelly, a little daughter that she has lost, speaks through her and talks in a baby language, as Feda does with Mrs. Leonard. The phenomena presented are intermediate between hypnotic and spiritist cryptesthesia.[1]

Mrs. Thompson gave me an excellent proof of lucidity. Myers had brought her to me for experiment. That evening my son Georges handed his watch to her, asking if she could say anything about it. She replied after some hesitation, "Three generations mixed." It would have been hard to say anything more descriptive, for the watch had been given by his grandfather, Félix Aubry, to his son Georges Aubry. After the death of the latter at the battle of Vendôme in 1870, M. Félix Aubry had had the watch back, and on his death he had left it to my son Georges.

Mrs. Thompson, being on the terrace at Monaco, saw an old gentleman and an old lady playing with a dog. She walked towards them and, without apparent reason, spoke to them, saying, soon after, that she had seen the word *Carqueiranne* over their heads. Now M. and Mme. Moutonnier were due to go to Carqueiranne with Myers to meet Mrs. Thompson herself. She had never heard M. and Mme. Moutonnier spoken of.

Dr. Frederic van Eeden, a Dutch physician living at Bussum, was introduced to Mrs. Thompson by F. Myers, but with great care to conceal his name and nationality from her. In the course of the séance Mrs. Thompson called him Mr. Bussum, said that he had a relation named Frederic and was a gardener in Eden. Dr. van Eeden had brought a piece from the clothes of a young man who had committed suicide, without, however, telling any one of the fact. Mrs. Thompson gave his Christian name and described his character. She said that he had blood on his throat, which agreed with the manner of the suicide. When Dr. van Eeden spoke in Dutch, Mrs. Thompson understood him quite

[1]See also Dr. Fr. van Eeden, *Quelques observations sur les phénomènes dits spirites, Congr. Univ. de psychologie de Paris,* 1900 et *A. S. P.,* 1901, xi, 240-52.

well, though she did not speak that language.[1] She recalled to Dr. van Eeden the conversation he had had with the deceased, and Dr. van Eeden in the end was absolutely convinced that there had been real communication with the departed. This personal conviction of an experienced psychologist like Dr. van Eeden has much weight.

James Hyslop has studied with extreme care a case of cryptesthesia which seems to him a proof of personal identity: Mr. Thomson, goldsmith and photographer, had known slightly a distinguished painter—Robert Swain Gifford—whom he had met once or twice on the marshes of North Bedford. He had also visited him once.

Gifford died in January, 1905, and Thomson that summer felt a first impulse to sketch and paint. At an exhibition of Gifford's works he seemed to hear a voice telling him, "Finish what I have begun." Thomson then began to make pictures in Gifford's style, some of them strikingly so. If it were rigorously proved that Thomson had neither seen, nor could have seen, Gifford's unfinished sketches, the demonstration of cryptesthesia would be astounding. But Thomson, whatever his honesty, cannot answer for his subconscious recollections, so that the case does not prove very much. It would be needful to prove that these unfinished sketches were absolutely unknown to Thomson. Flournoy was much more exacting with Helen Smith, and very properly so.[2] It seems to us impossible to admit the *possession* of Thomson by Gifford's spirit.

Similarly the case cited by Aksakoff cannot be considered demonstrative. A nurse, Anastasia Perelyguine, poisoned herself and died in the little town of Tamboff on the 16th of November. On the 18th the name *Anastasia* was given at a séance, with details of her suicide. It does not affect the case that the medium and sitters state that they knew nothing of the matter; it would be quite enough that they had heard (and forgotten) between the 16th and 18th some talk of it, for the incident to be referable to subconscious memory. These are very doubtful cases that cannot be taken into account; for in metapsychics as in all other sciences doubtful demonstrations do more harm than good.

Grasset, in his book published in 1908, would seem to have deliberately omitted cases that prove telepathy; and as he only

[1] Cf., p. 224.

[2] *Amer. S. P. R.*, 1910 and *A. S. P.*, 1910, xx, 193-264.

mentions poor and uncertain ones he has no difficulty in deducing the nullity of telepathy (cryptesthesia). But this is not fair discussion. The stories in *L'Echo du merveilleux*, and likewise the accounts given by Aksakoff, are often very questionable both as observations and in their interpretation.[1]

Mrs. C., who is in no way a professional medium, gave a séance to Messrs. Venzano and Bozzano in the Minerva circle at Genoa. At the outset the raps indicated to Mrs. C. that her infant Robert, whom she had left at home quite well, was in high fever. She at once left and found that the child was very feverish, the servant being very anxious about him. The incident is not demonstrative, for various reasons.

Mr. Venzano, experimenting with the Misses G. (non-professional), whose hands were the only ones on the table (rappings), was thinking of a friend some years dead. This name was given and also that of a fellow-student of himself and his dead friend. Near the close of the séance the name Cipriani was given. Searching his memory, Venzano recollected that this was the familiar name of an octogenarian relation several years dead. Then, unrequested, the table gave the name Teresa Bartolini, who was the wife of Cipriani (*A. S. P.*, 1905, xv, 694).

At a private séance in the house of Mme. J. H. at Paris, Rue Saint-Charles (xv arr.) near the fortifications, on July 31, 1914, the Count Ugo Baschieri exclaimed suddenly, "An important person is about to be assassinated. What quantities of blood! What is the time?" The clock showed 9:40 P.M. "Well, something has happened near the Boulevard des Italiens." On that date, between 9:35 and 9:40, about three hundred yards from the Boulevard des Italiens, M. Jaurés was the victim of a cowardly assassination.

This cannot be classed as a premonition, for the event took place simultaneously with the announcement. Of course chance may be invoked as usual by persons who are resolved to deny everything, but that is a very poor explanation.

This case much resembles that of the assassination of Queen Draga mentioned later on, and also the well-known case cited by De Vesme, of Apollonius of Tyana, who during a lecture at

[1]Grasset, *loc. cit.*, 316. The chapter on the detail of facts is but 13 pages, of which two are devoted to Mme. Couesdon, the seeress of the Rue Saint-Denis, and two to Mr. Dace, the well-known (?) young occultist. Is such criticism worthy of M. Grasset?

Ephesus, suddenly broke off, saying that the tyrant Domitian had been killed at Rome. The story is given by Philostratus and Dio Cassius in his history; but can we believe it?

M. Lemaire, a professor at Geneva, experimenting with H. Smith, says that the medium, at the outset of the séance, "smelt stones"; she said that one Jean had come for Mrs. N., who had attended some previous séances. Mrs. N., searching her memory, remembered that when a child this man Jean, a working quarryman, had a great affection for her. His work used to be to prepare and light the fuses for blasting (*A. S. P.*, 1897, vii. 74). It is an unimportant matter.

Mr. Arthur Hill reports some very conclusive experiments. One of his friends, a Mr. Frank Knight, went (absolutely *incognito*), to Miss MacDonald, a professional medium, who told his name (Frank), the name of his mother (Freda Katherine), the names of his sister and brother (Janet and Herbert), and of Benjamin, his uncle.

Another medium, Mr. Watson, gave Mr. Knight the name of his mother (Mary Katherine), of his great-grandfather (Oliver Upton), and of two of his relations (Kathleen Thornes and Benjamin Thornes), to which names Watson added the name "Carter" which is a family name of Mr. Knight, but disused for more than a century.

Other very numerous investigations with Watson were made, which seem to have resulted in convincing even a person so little inclined to credulity as Mr. Arthur Hill of the reality of cryptesthesia. Even if we make the rather absurd supposition that Watson made enquiry at the cemeteries so as to get information by the names on all tombs relating to the numerous family of the Knights, that would not explain the whole. These investigations were very carefully studied in full detail by Mr. Arthur Hill[1] (pp. 113-116). I think therefore he is justified in saying:

1. That frauds due to extensive, difficult, and almost impossible researches, very prolonged and numerous, made by mediums, the better to deceive those who consult them, are extremely unlikely. The detectives employed to watch Mrs. Piper discovered nothing. It is also to be observed that any mediums making such enquiries would always be risking discovery *in flagrante delicto* of prepared imposture, which would ruin their reputation.

[1] *New Evidence in Psychical Research*, with an introduction by Sir Oliver Lodge, London, W. Ridder, 1911.

2. The observers are not hallucinated.

3. The probability of some successes in research on cryptesthesia is so small that chance cannot be invoked with decency.

4. In fine, everything depends on rigorous methods and conditions of experiment. If the experimenter remains absolutely silent, refraining from the slightest signs of approval or negation; if he is quite impassive and takes full notes on all that is said, then the experiment is valuable. Such impassiveness and complete record of all the medium's speeches is, however, very difficult.

Mme. Briffaut, of Paris, has given many and certain proofs of lucidity. Among these, out of many others, I will quote the following: Mme. G. de Montebello, visiting her, and quite sure that Mme. Briffaut could not know her name or anything about her, received a convincing proof of cryptesthesia: "I see someone who calls himself L. Louis, is it not?" Mme. de M. inclines her head affirmatively. "He is your son?" Yes. "He was killed in the war?" No. "Nevertheless," said Mme. Briffaut, "he signs to me that he died suddenly and violently all at once." Now in fact Louis de Montebello was struck by lightning before the war. If Mme. Briffaut made a mistake it was only in the interpretation; she had been made aware of sudden and violent death and concluded (wrongly but reasonably) that this took place in the war. Other exact and valuable details were given. By the side of Mme. de Montebello Mme. Briffaut saw an old lady steadily writing. This referred very clearly to the grandmother of Mme. de M., who spent the last fifteen years of her life in writing her memoirs.

This experiment with Mme. de M. is a very satisfactory one, but with some other persons Mme. Briffaut's results were nil. Such cases of clairvoyance seem to depend almost as much on the percipient as on the agent. Mme. de Montebello usually gets extraordinarily detailed and precise answers when she consults a medium, a sensitive, or a somnambulist, so that I am inclined to think that a medium's lucidity does not work indifferently for everyone. There are some who "inspire" them, and some who do not.

My daughter, Mme. A. G. Le Ber, whose name was known to Mme. Briffaut, received a number of particulars the value of which is scarcely diminished by the name being known. Indeed to learn all that was said, Mme. Briffaut would have had to enter on long and difficult enquiries, and in any case she indicated

verbatim a very private conversation that Mme. Le Ber had with her brother Albert, killed in the war, and this private conversation was known to no living person, except to Mme. Le Ber herself.

Arnaud de Gramont, under the pseudonym of Dr. X., went to see Mme. Briffaut and told her that he had lost a son in the war. Mme. B. said, "He was killed by a wound in the head, he fell from a great height; he was in the Flying Corps" (correct). She saw the name S...mont. The first name of M. de Gramont's son was Sanche.

The Bulletins Nos. 1 and 2 of the International Metapsychics Institute (Paris), 1920, contain many interesting details on Mme. Briffaut's cryptesthesia. To Mr. Jean Lefèbvre, who was quite unknown to her, she gave the names of his brothers Pierre and Joseph. She said that the wife of the latter had died less than a year before from an operation on the liver (correct). To Mr. Lemerle, a cautious and trained observer, whom she could not have known, she said at once, "I see Jacques! a young man who died tragically. I hear him call: he writes Jean, Henri . . ." Both the sons of Mr. Lemerle had been victims of a serious accident to an automobile. Henri was killed, but Jacques escaped death. The *Revue Spirite* of May, 1921 (p. 144), contains a notable case of Mme. Briffaut's clairvoyance.

Analogous facts to those given by Mme. Briffaut in Paris and by Mrs. Leonard in London were obtained by a sensitive named Ludwig Aub, of Munich.[1]

A medical student went to see Aub, giving neither his name nor his profession. Aub told him, "You are a medical student, you are fond of music, especially Mozart. Your father was a physician, also your grandfather, at Stettin." To Dr. O. Aub said, "Your father was a philosopher, your mother is of English birth but lived in Austria. You have recently been married" (all details correct). To Dr. S. he said, "It is characteristic of you that you have in your house a large picture of the time of Albert Dürer; it is valuable, and you take great pride in it" (correct). To Dr. G. he said, "You have a predilection for Gustave Flaubert." That very morning Dr. G. had written a preface to the works of Flaubert.

Mr. Hayward has methodically analyzed the answers given by

[1]Von R. Tischner, *Eine physiologisch-okkultistische Studie* (*Psychische Studien*, xlvii, 1920, 598-612). Tischner cites various publications on Aub that appeared at Munich, by Dr. Dingfelder, G. W. de Surga, and others.

Mrs. K. near Montreal; but they do not show any very high degree of lucidity (*Fortune-telling, Am. P. S. P. R.,* 1921, 185).

To sum up: From all these experiences of cryptesthesia whether with sensitives, mediums, or somnambules, one very clear conclusion emerges—that there is a faculty of cognition by other means than by the ordinary sensorial channels.

At the present time it cannot be doubted it has become almost a commonplace and will soon be generally admitted; people will then marvel that it should have been so long misunderstood, ridiculed, and denied by official science.

I may be allowed to recall with some pride that in 1888 (*P. S. P. R.,* v) I clearly affirmed this strange fact that now dominates all subjective metapsychics: "In certain persons, at certain times, there exists a faculty of cognition which has no relation to our normal means of knowledge."

I have nothing to alter in what I then said; unless that this proposition, which then seemed so rash, is now on the point of being universally accepted, it is accepted by Mrs. H. Sidgwick and by Sir Oliver Lodge. Very soon it will seem so simple that no one will think that there was any rashness in putting it forward.

The phenomenon of cryptesthesia is as certain as any other scientific fact; to deny it is to rebel against all scientific demonstration.

All these experiments with Mme. Briffaut, Mrs. Leonard, and Mrs. Piper seem to give some support to the spiritualistic theory; and I make this avowal against the grain. The lucidity of these seeresses appears to occur only because a spirit seems to intervene to reveal such and such a fact to them. I am careful not to infer that this is so, but *everything happens as if* the spirit of the deceased intervened to tell the medium his name, his relations, the facts he knows, and to converse with the "guide" of the medium.

This is no doubt only a semblance; the means of cognition remain mysterious. The hypothesis that the facts are communicated to us by a being seemingly human is a very anthropomorphic hypothesis. We may allow it a place, strictly provisionally, and on this delicate matter it is advisable to take the scientific ground here adopted. I consider cryptesthesia absolutely demonstrated, but I reject all hypotheses on the origin of these revelations and divinations, considering the proofs insufficient.

There are many other interesting facts mentioned by Myers,

Bozzano, and others which I do not give here; because they can be explained by forgotten, subconscious, but normal ideas, even when this explanation seems improbable. To warrant the inference of cryptesthesia at all there must be absolute *impossibility* that the information given should have come through any normal channel. M. Heintzer, for instance, sees the apparition of his father with a white beard and in a dress coat. He knew that his father was dead and had never seen him when his beard was white. While Mr. Heintzer was abroad his father had been buried in a dress coat and during his last illness the beard had turned white. Is it not possible that the son had heard of these circumstances and forgotten them, though he might in perfect good faith deny this?

Flournoy may be right in supposing that the name Burnier[1] did not come to his medium by any process of metapsychics or cryptesthesia. Although the explanation by normal means is terribly involved and improbable, it must be admitted to be just possible.

The extraordinary powers of the latent memory are such as to make any illusion possible. Stainton Moses writes automatically, by the dictation of Rector, "Go to the bookcase and take the last book but one on the second shelf, look at the last paragraph on page 94, and you will find this sentence . . ." A long sentence follows. Stainton Moses gets up, takes the book, and verifies that the quotation is correct and is on p. 94. But it is reasonable to suppose that this may be a very complete and perfect subconscious reminiscence rather than a fact of cryptesthesia. Shortly after, Rector writes, "Pope is the last great writer, etc., . . . Take the eleventh volume on the same shelf, open it, and you will find this sentence. . . ." Stainton Moses does as instructed and finds the quotation on p. 145. The thing is very strange: why did the book open at the very page quoted? Was this fortuitous? Chance explains nothing. Could it be that Stainton Moses had previously opened the book in a state of semi-somnambulism?

Mme. R. has given me wonderful instances of cryptesthesia that cannot be explained by telepathy. Mme. R. is a lady forty years of age, a non-professional medium, married, and the mother of a family. She is interested in spiritualism because while very

[1]See p. 773 (French edition).

young she says that she had a vision that preserved her from a great danger. (Helen Smith had a similar experience early in life.)

Mme. R.'s communications are usually by automatic writing, sometimes verbal, and (rarely) by raps. I will quote three that are very clearly demonstrative:

1. This concerned one of my dear friends lately deceased, whom she had not known, and whose name I believe I never mentioned before her. She told me that his name was *Antoine,* that I entered the room a few moments after his death and kissed his forehead; she added that he used to call me Carlos. The name, the detail of the kiss, and the fact that he alone of all my friends called me Carlos are all characteristic.

Antoine, speaking by Mme. R., said that he had been at Fontainebleau with his wife Lucie, saying, "We were sadly happy there." His widow assured me that this fitted the facts. I did not know of the visit to Fontainebleau. The name "Lucie" was not quite wrong, for the lady told me that Antoine used often to say to her, "It is a pity that your name is not Lucie! That is the name I like best!"

2. The next case is still more striking. A near relation of mine, a young man of one-and-twenty, poisoned himself with strychnine. The cause of death was kept secret from everyone, except from his father, his uncle, and myself. It was never mentioned in any newspaper. Three weeks later I asked Mme. R. for the name of a near relation lately deceased; she said, "He was called George; you were at his death-bed, there was a red foam on his lips." This was absolutely true. Then she said, "Lulu, Lulu." In his family he was called "Lolo." I set aside numerous and serious mistakes, but there is one characteristic detail: George, speaking by Mme. R., said, "Stephen, Stephen![1] Oh, that writing! I thought I could never finish it!" This referred to an incident quite unknown to anybody, and was most astonishingly precise. Before killing himself, the unhappy boy had written a long letter to a friend, Etienne, which he had left open on the table. No one but his father, his uncle, and I had seen this letter. Now Mme. R., who lived a retired life, could know nothing of all these facts which we had all three kept strictly secret. I knew nothing of Etienne, George's friend.

[1]**The name Stephen in English corresponds exactly to the French name Etienne.**

3. The third fact, which on thinking it over, appears to me one of the most striking examples of cryptesthesia yet obtained, is the following: I give the details, for it shows astonishing lucidity acting at a distance of 1,200 miles, and exact notes were taken. In June, 1906, at 10.30 P.M., in presence of my friend Octave Houdaille, Mme. S., Mme. R., and her twelve-year-old daughter, after some incoherent phrases, we got the following sentence by raps, more distinct than ever before. (In the whole course of my experiments with Mme. R. the raps were unintelligible only twice or three times.) "Bancalamo"; I could not refrain from saying, "Oh, it is Latin, calamo!" But the dictation continued imperturbably, "Banca la mort guette famille." Thence onwards the answers were incoherent. I thought at first that the first word must be in Italian—Bianca=Blanche; but no one present could interpret the words.

The next day, Thursday, at 2 P.M. the news of the assassination of Queen Draga of Serbia was received at Paris. Some Serbian officers, having bought over the palace servants, entered at midnight and assassinated King Alexander, his wife, and her two brothers; her two sisters escaping by a miracle. Not for a moment did I connect this tragedy with the previous evening's séance.

On Friday, reading in the paper some details relative to the crime, I learned that Draga's father was named Panka, and this came as a ray of light.

1. The word Banca is very near Panka. (I will return to this later.)

2. The time at which the message was given, 10.30 P.M., is, to a minute, the time at which the assassins left the *Hotel de la Couronne de Serbie;* correcting for Belgrade time which is one and one-half hours in advance of Paris time.

3. The words apply with startling exactitude to the peril menacing the whole family of Panka; the words "Death lies in wait family" could hardly be more appositely chosen in view of the situation at midnight in Belgrade.

Now to consider how far the five letters of the word Banca are applicable to Draga's father. Of these five letters, each carrying a probability of 1 to 25, three only are correct. The compounded probability is therefore in round figures 1 to 1500. But analyzing the entire word the probability is much less. That the word should have five letters, neither more nor less, works

out to 1 to 7. For a chance name there might have been 4, 5, 6, 7, 8, 9, or 10 letters (Jean, Marie, Robert, Etienne, Julienne, Eleonore, Marguerite). The compounded probability is then 1 to 10,500. But more than this, B for P is not totally wrong if the communication were by sound: Germans interchange them and say *brophet* for "prophet" and *petter* for "better."

The error in the fourth letter is curious, for in the Serbian alphabet the fourth letter in the name of Draga's father is a single letter pronounced *dj* or *dz,* or *tz* that the French alphabet (which we were using) does not contain and it would seem that C comes nearest to it in sound. Even if we allow that B is quite wrong, we must admit that C is not and the total compounded probability then becomes 1 to 500,000, which is a moral certainty.

Only three hypotheses are possible in subjective metapsychics: (A) Mal-observation, collusion or illusion; (B) chance; (C) cryptesthesia. In the experience narrated above, collusion or illusion must be ruled out, for the message was given before the event was known. No one in Paris knew at 10 P.M. on the 10th of June that there was a plot against Draga; and of the five persons present, who had no relations at all with any Balkan State, probably none even knew of Draga. The only hypotheses remaining are chance and cryptesthesia.

Chance, however, is inadmissible: for not only was a name given against odds of 1 to 500,000; but the fateful phrase "Mort guette famille" probably applies only to the family of Panka whose three children were in a few minutes to perish; out of the fifty millions of families existing that evening in Europe. Grasset, however, has not hesitated to affirm that chance gave *Banca* for *Panca* and that the words "Mort guette famille" might apply to a thousand other families. The objection is really absurd.

In fact, if an intelligent force inspired this sentence—and appearances favour this bold hypothesis—it would seem that this intelligence wished to make a declaration whose authenticity could be verified. If Panka had been some old working baker of Belgrade I could never have ascertained whether the monition were veridical or fanciful. No one can investigate fifty million families, a hundred at most would be the limit.

(b) Investigation with a Hidden Alphabet

Here I would indicate a new method which I devised for verifying cryptesthesia. It succeeded with me because I was ex-

perimenting with a medium endowed with the special sensitiveness required; but Sir William Barrett has shown that it may succeed with others. In any case this method with a hidden alphabet has great advantages and deserves trial, though I would not insist upon it, as mediums are best left to act according to their intuitions in choosing the method by which answers are obtainable.[1]

These experiments were carried out with Gustave Ollendorff, Henri Ferrari, Louis Olivier, Albert Père, and Gaston Fournier —nearly all deceased, alas, my faithful and beloved comrades! The medium was my deeply regretted friend, Gaston Fournier, then aged thirty-two, a kindly man, clear-sighted and reliable.

The experiments were made in the following manner: G., the medium, placed his hands on the table, every tilt setting in

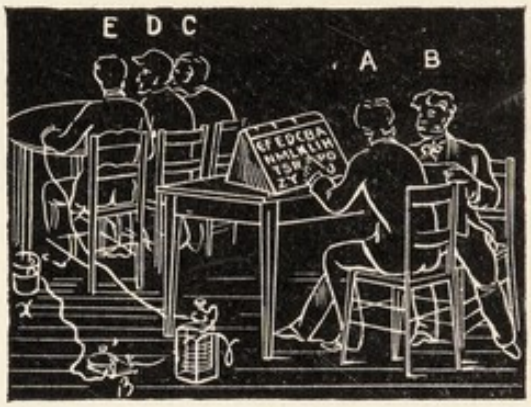


FIG. 10.—Arrangements for experiment with a hidden alphabet. E. D. C. are at the tilting table with their backs to A. and B., who have the alphabet before them. The bell is so fixed as to ring if the table tilts.

motion an electric bell. C. and D. also had their hands on the table but did not influence it.

At three or four yards' distance on another table, and behind a sheet of cardboard, the alphabet was placed so that G., who had his back turned to it, could not see it. A. and B. sit at this table. A. runs over the alphabet with a pencil, B. writes down the letter at which the table tilts, he being made aware of this by the sound of the bell.

[1]See Ch. Richet, *La suggestion mentale et le calcul des probabilités, Rev. Philosophique,* October, 1883, 609. *Des mouvements inconscients* (*Hommage à* M. Chevreul), Paris, Alcan, août 1886 et *Revue de l'hypnotisme,* 1886, 170 and 209. An excellent analysis has been given in *P. S. P. R.,* 1884, fasc. vii, 239. *Relation of diverse experiences,* etc., *P. S. P. R.,* June, 1888, 138.

The letters indicated by this method give intelligible sentences; therefore, the tilts being due to unconscious muscular pressure by G., these pressures, indicating the letter required, must be due to lucidity. Everything happens as if G., wanting to send a message, could see the alphabet to which his back is turned and which is hidden by the cardboard sheet. The movement of the pencil over the letters is both silent and irregular, and during these experiments we intentionally talk, sing, recite verses, and in fact make such a noise that B., who writes down the letters, can hardly hear the stroke of the bell.

One day by excess of precaution I used a circular instead of a rectilinear alphabet, and beginning, not at A but with some other letter, and moving the pencil at very different rates, we got *Fa zol do.* These are not chance letters but indicate intelligence, and therefore cryptesthesia.

All answers that have a meaning at all, even if uninteresting, indicate cryptesthesia, and that of a peculiar kind—the perception by the medium of a hidden letter—such perception being unrelated to normal sight or hearing.

Complete sentences were given, transposed verses, such as

"Tombe aux pieds de ce sexe à qui tu dois ta mère."

Or Latin lines:

"Infandum, regina, jubes renovare dolorem."

Or phrases in old French as when the soi-distant Villon "Où sont les neiges d'antan? Louys le Cruel. Essai sur daemoniomanie."

The sentences are meaningless in themselves, but show cryptesthesia, for it was quite impossible for Gaston, whose muscles were moving the table, to know the letters pointed to by the pencil which I was moving irregularly and silently over the hidden alphabet.

Sir William Crookes came one day to be present at one of these experiments. He put the mental question, "What is the name of my eldest son?" By the hidden alphabet we had the answer, "I know only the slang." The alphabet was not only hidden as before described, but it was lit by a small lamp that barely allowed us to see the letters. The answer might be to any question, but the point is that the table-tilts corresponded with the movements of the pencil that could not be perceived by Gaston by any normal means.

These experiments also demonstrate the power of the subconscious, for Gaston, like the rest of us, sang, laughed, and talked during the whole of these experiments, some of which were complicated—such as the dictation *backwards* of a Latin verse. The whole of his conscious personality was in full activity, while the subconscious part was no less active in quite another manner independently of the consciousness.

Is this alphabetical cryptesthesia telepathic? It is possible, there is no evidence one way or the other; but in one case there was certainly no telepathy from those present, though the result calculated according to probabilities was not at all striking. I said to a Mr. D. who was very sceptical, he not being present at the experiment, "Think of some name, either that of an historical person or any unknown name, we will get it by the table and I will tell it you tomorrow." The answer obtained was F.N.T.B.T. If we take each preceding letter, as is quite permissible, we get E M S A S.

The name thought of by Mr. D. was Cesar or Cæsar. On five letters with a probability of 1 to 25, two being correct, the compounded probability is 1 to 42; but this is not all, for that the answer should be a word of five letters corresponding to a word of five letters thought of, gives a probability of 1 to 7. The total then becomes 1 to 294; and if the table lagged behind the movement of the pencil, the word comes out as D M S A R, which passably approaches Cæsar.

I mention this experiment, which in comparison with the good ones described above, is terribly poor, not to draw any inference from it, but only to show that when the methods of experiment are faultless, the calculus of probabilities is very useful. For my own part I prefer an unexceptionable experiment where the odds against chance success are small, to one against which the odds are very high, but where the experiment itself is vitiated by a slight error which makes the calculus inapplicable.

I will mention one more experiment. Paul, the brother of Gaston, in no way mediumistic and very sceptical, was present at a séance without touching the table. We asked him to think of a name. The name thought of was indicated by C H E V A L. The name thought of was Chevalon. Mlle. Chevalon, some time deceased, was a friend of the family to which Gaston and Paul belonged. We then asked the spirit "Chevalon" to give us something characteristic, and by means of the table and the hidden

alphabet we got "How is your mother?" On which (it must be acknowledged) Gaston was frightened; and neither that evening nor afterwards would he act as medium. I could never persuade him to try again.

Experiments with a hidden alphabet are, I think, very valuable as giving decisive proofs of cryptesthesia. They have been recently repeated by Sir William Barrett very successfully.[1]

The mediums, who were personal friends of Sir William, were completely blindfolded by a mask covering the whole face; the letters of the alphabet, placed before them, could not be seen at all by them and moreover these letters were placed at random and covered with a sheet of glass and screened by a table-cloth. Under these conditions coherent messages were received. The actual sense of these is of no importance; it is sufficient to know that the letters indicated by very rapid and vigorous movements of the planchette were not chance combinations but had very distinct meanings.

In one case, very carefully observed by Sir William, the mediums, Mrs. Travers-Smith and Mr. Lennox Robinson, were blindfolded and the letters of the alphabet were placed (anyhow), under a sheet of glass. One evening a few hours after the torpedoing of the *Lusitania,* it was indicated by this means that Sir Hugh Lane, a friend of the two mediums, had been drowned. While the séance was in progress and after this announcement had been made, one of the evening papers gave the name of Sir Hugh Lane as one of the victims.

This case cannot be held to carry much weight, as the mediums knew that the *Lusitania* had been torpedoed and that Sir Hugh Lane had left America some days before. It would have been easy for subconsciousness to conclude that he might be one of those drowned. The full account of this experience is given by Mrs. Hester Travers-Smith (*Voices from the Void,* London, Rider & Co., 1919, 35).

A better experience, analogous to the above, is also reported by Mrs. Travers-Smith. One evening after a fruitless séance, there came through the table, "Ship sinking, all hands lost, William East overboard. Women and children weeping and wailing; sorrow, sorrow, sorrow!" At that moment a newsboy in the street cried the news. Mrs. Smith went to get the paper which

[1]Account by Miss Dallas. *Expériences avec l'Oui-ja, les médiums opérant les yeux bandés* (*A. S. P.,* March, 1916, xxvi, 45).

contained the shipwreck of the *Titanic*. "William East" might well stand for William Stead.

Although the case of Sir Hugh Lane does not prove the monition, it stands as evidence for the production of messages by a hidden alphabet, and therefore is a good case of cryptesthesia. Mrs. Travers-Smith has given several other decisive proofs.

A professor of the University of Groningen, Mr. Heymans, undertook some experiments in a manner different from that described above which gave very interesting results. His medium was a non-professional, a student. He has not as yet published anything, but he wrote me the letter given below: "Our experiments in telepathy were carried out in two rooms at my laboratory, one over the other. The blindfolded subject was placed in the lower room behind a screen enclosing him on three sides, and with an opening in front through which his hand could pass. This hand can move over a board divided like a chess-board into forty-two squares. In the ceiling of this room, made of reinforced concrete, there is an opening about thirteen inches by twenty-one inches, closed top and bottom by sheets of glass. Looking through this window one of us in the upper room can see the board and the hand of the subject, and he tries *mentally* to direct the hand to a given square determined by lot. The upper room being kept dark, the subject can see nothing even if he were not blindfolded. No sound can penetrate the ceiling; even by shouting one cannot make oneself understood. Nevertheless the correct square (probability 1:48) was indicated 32 times in 80 trials. The mathematical probability of 32 successes on 80 trials is $(\frac{1}{10})^{21}$."

There may be telepathy in this case, but there certainly is cryptesthesia, for there are two factors involved, (1) the carrying out of the agent's thought by telepathy, which is one of the modalities of cryptesthesia; and (2) after the square has been thought of, the movement to that square; which can only be cryptesthesia.

The care with which this eminent psychologist has made these experiments renders them very valuable.

It would be very interesting to resume experiments (using the hidden alphabet) with powerful mediums, who might doubtless be trained to correspond in this manner. In any case it is obvious that cryptesthesia admits of great varieties in experimentation and conceals unforeseen possibilities.

(c) Cross-Correspondences

This is an ingenious proceeding to verify lucidity. It has been much used of late in England and America.

The principle is as follows: Two persons, A. and P., agree to write each other letters simultaneously to see if their thoughts coincide. The letters are dated and carry the post-mark. The experiment is unexceptionable, especially if the thought of the agent, A., is determined by chance. But even if this is not so chosen it is highly unlikely that two persons acting in good faith should hit upon the same idea.

Miss Ramsden and Miss Miles have had some results worthy of note.[1] Miss Miles was in London, and Miss Ramsden at Bulstrode, eighteen miles distant. Miss M. was the agent, and Miss R. the percipient.

October 27th, Miss M., spectacles; Miss R., spectacles.

October 30th, Miss M., a watch; Miss R., a medal on a chain.

October 31st, Miss M., while combing her hair, sees the sunset on the Brompton Oratory, with the cross standing out against the sky. She desires to transmit this. Miss R. thinks that Miss M. has wished to transmit a crucifixion; she is surprised to see only the cross without the holy women at its foot.

November 4th, Miss Ramsden describes: Gothic arches like a cloister; long-necked herons and water-birds; a row of guns fired; a woman with a shepherd's plaid; a long-haired dog, a greyhound, and a fine retriever.

November 4th, Miss Miles went to the church at Malmesbury where there were Gothic arches resembling a cloister. There was some talk of rabbit-shooting; swans and a heron were seen; there were greyhounds and retrievers. Mrs. de Beaufort, a friend of Miss Miles, was wearing a shepherd's plaid.

Other proofs of cryptesthesia have been given by cross-correspondence. I quote only one, given by Miss Johnson, who is a research officer of the *S. P. R.* (*Survival of Man,* Sir Oliver Lodge, p. 226). "Mrs. Forbes's script, purporting to come from her son Talbot, stated that he must now leave her, since he was looking for a sensitive who wrote automatically, in order that he might obtain corroboration of her own writing. Mrs. Verrall on the same day wrote of a fir-tree planted in a garden, and the script was signed with a sword and suspended bugle. The

[1] *P. S. P. R.,* October, 1907.

latter was part of the badge of the regiment to which Talbot Forbes had belonged, and Mrs. Forbes had in her garden some fir-trees grown from seed sent to her by her son. These facts were unknown to Mrs. Verrall. In another case (*Proc. S. P. R.*, xviii, 269-271), on October 16, 1904, Mrs. Verrall's script gave details, afterwards verified, of what Mrs. Forbes was doing; and immediately afterwards Mrs. Verrall had a mental impression of Mrs. Forbes sitting in her drawing-room, with the figure of her son standing looking at her. Mrs. Forbes's script of the same day, purporting to come from her son, stated that he was present and wished she could see him, and that a test was being given for her at Cambridge."

The laborious studies by Mr. Hubert Wales must be considered under this head.[1] He received notes sent to him almost daily from Miss Samuel, and he himself took daily notes at Hindhead (about forty miles from London). The intention was to see if there were correspondence in these notes relative to Mr. Wales's thoughts and occupations. The method is excellent; but the results do not seem very demonstrative of cryptesthesia. Mr. Wales classed the notes in three groups:

(1) Veridical, hardly attributable to coincidence, 16; (2) Partially and confusedly veridical, 200; (3) No connection, 159.

The whole observations, 375, extended over eight months. It is not easy to draw a definite inference, even on the 16 cases considered veridical; they are about 4 per cent. of the whole. But there were some very encouraging results, especially of apparent premonitory impressions.

The study of cross-correspondences has been pushed very far. With inexhaustible patience, Mrs. Verrall, Miss Helen Verrall, Mrs. Holland, Miss Alice Johnson, Mr. Piddington, Dr. Verrall, and Mrs. Sidgwick have elaborated a long and remarkable series that could be brought to a satisfactory conclusion only by persons who, like Mrs. Verrall, unite scientific insight with a profound knowledge of classical literature and exceptional powers of mediumship. Any analysis of them, however, would be lengthy and if not minute would be unenlightening.

The personality of Myers certainly seems traceable in some words of Mrs. Piper's, and also in some writings of Mrs. Verrall's.

[1] *A Report on a series of cases of apparent thought transference without conscious agency, P. S. P. R.*, 1920, xxxi, 218-924.

Mrs. Piper knows neither Latin nor Greek, nevertheless she makes quotations and allusions that are so numerous, so skilful, and so complex that no trickery so perverse can be supposed. It has thence been inferred that it was Myers, then recently deceased and during his lifetime well versed in classical literature, who was the inspirer of these writings. Numerous attempts were made to establish a relation between the writings of Mrs. Verrall (V. Myers) and the speeches of Mrs. Piper (P. Myers). Coincidence in these would not have been a proof of personal survival, but might have been a beginning of such proof (*S. P. R. Proc.*, 1910-1914). It is not possible here to enter into further detail. It will suffice to cite the diametrically opposite conclusions arrived at by J. Maxwell and Mrs. Sidgwick.[1]

Maxwell thinks that exaggerated weight has been given to symbolism and that the interpretations of that symbolism are sometimes fanciful, sometimes wire-drawn. He is inclined to think that placing so much confidence in automatic scripts and seeking to find in them far-fetched and complicated symbolism would end in finding transcendental relations everywhere.

He therefore declines to admit the inferences drawn by Mrs. Verrall and Mr. Piddington. "It is impossible," he says, "to admit the intervention of a spirit. We want proof of facts; and the system of cross-correspondences is founded on negative facts and is an unstable foundation. Only positive facts have an intrinsic value, which cross-correspondences cannot show; not at present, at any rate."

Mrs. Sidgwick differs from Mr. Maxwell.[2] According to her the probability of personal survival is strengthened by the general character of the communications which show in both ideas and wording more similarity to the ideas of the supposed communicators than with those of the mediums. This argument of Mrs. Sidgwick's is not very strong, for the subtlety of the subconscious in mediums is sufficient to reconstitute the personality of Myers or of any other person in a most striking manner. Mrs. Sidgwick adds, with very good reason, that more positive proofs are required.

[1] J. Maxwell, *Les correspondances croisées et la méthode expérimentale, P. S. P. R.*, part lxv, 1912, 54-144.

[2] *A reply to Dr. Joseph Maxwell's Paper on cross-correspondences and the experimental method, P. S. P. R.*, July, 1913, part lxvii, 375-401.

Mr. Gerald Balfour[1] concludes that this long and laborious investigation leads slowly but surely towards the inference that many facts appearing in this cross-correspondence can be satisfactorily explained only by the spiritist hypothesis.

Mr. Balfour states his conclusions on these long automatic scripts simultaneously received, to the following effect: "All three mediums mention Euripides; they all indicate more or less clearly that Euripides is the subject of the cross-correspondences. Two of them connect Euripides with the *Hercules Furens.*"

In another case which Mr. Balfour considers good, Mrs. Piper says: *Light in the West,* and Mrs. Verrall says, "The words are from *Maud* (Tennyson), 'Rosy is the East.'" The true quotation is "Rosy is the West" (*Maud,* xvii).

These are certainly well-marked cases of cryptesthesia; but whether there is cryptesthesia, or lucidity, or telepathy, these do not in any way imply survival of a conscious personality.

On the other hand Mr. Hereward Carrington concludes (and I quote his words as agreeing with my own conclusions) the total facts "are all fully explicable upon purely psychological and naturalistic lines. They almost invariably resolve themselves into simple subconscious memory associations. Chance has played a larger part than is allowed for. All these communications, despite the great labour that they represent, carry less proof of survival than the séances of Mrs. Piper speaking as George Pelham" (*A. S. P.,* 1909, xix, 294). It seems that this judgment of Mr. Carrington's is justified: but we agree with him in recognizing that many of the phenomena of cross-correspondence abundantly establish telepathy and cryptesthesia, even if they do not prove survival.

5. *Cryptesthesia Among Sensitives*

If we define as "spiritist" those phenomena in which an extraneous personality seems to intervene (maintaining all reserve as to the reality of such personality), we see that cryptesthesia appears with increasing intensity (1) in normal persons, (2) in hypnotized subjects, and (3) in mediums.

But there are some of its manifestations in persons that cannot be referred to any of these three classes. We will call these persons sensitives. As the facts defy classification, such distinc-

[1] *Some recent scripts affording evidence of personal survival, P. S. P. R.,* 1914, xxvii, 221-243.

tions must be arbitrary; for mediums, even when not in trance, are sensitives; hypnotizable persons, even when not hypnotized, very often are sensitives; and certain persons who are not hypnotizable and are not mediums, show powers of cryptesthesia sufficient to prevent their being classed as normal. They, too, are sensitives.

Moreover, the passage from the normal state to a state of trance, and from the hypnotic to the waking state is always gradual, often undefinable, and all transitional states are gone through. Nothing is more artificial than to make sharp divisions between the normal state, the hypnotic, mediumistic trance, and a state of sensitiveness. These distinctions are only conveniences for study. In order that experimental lucidity may be exercised, certain exterior aids are sometimes necessary—psychometry and crystal vision.

(a) Psychometry, or Pragmatic Cryptesthesia

The term "psychometry" (soul-measurement) is so detestable that we cannot retain it in scientific language. It was invented by Buchanan.[1]

Buchanan's "psychometry" is really nothing more than a method of developing cryptesthesia, and we shall therefore call it pragmatic cryptesthesia (i.e., cryptesthesia by means of material objects).

Pragmatic cryptesthesia must be understood in a different sense than that understood by Buchanan at its inception. That inception was very strange. Elizabeth Denton (Mrs. Buchanan) on seeing and touching some fragment from a geologic stratum, reconstructed a Silurian or Jurassic landscape! Only a simpleton would take this at face-value: it is nothing but the result of brilliant imagination on the part of the wife of an expert geologist, and all these accounts by E. Denton have only a literary interest.

[1]On this, see Buchanan, *Manual of Psychometry,* Boston. W. Denton and Elizabeth Denton, *Nature's Secret or psychometric research,* London, Houlston & Wright, 1863. W. Denton, *The Soul of Things.* L. Deinhard, *Psychometrie. Sphinx,* x. Jos. Peter, *Psychometrie (Die Uebersinnliche) Welt, trad.* in *A. S. P.,* 1910, xx, 231-240, 276-280. Thaneg (pseudonyme de Descormiers). *Méthode de clairvoyance psychométrique,* Libr. des Sc. Psych., Paris, 1902. James Coates, *Seeing the invisible: Practical studies in psychometry, thought transference, telepathy, and allied phenomena,* London and New York, Fowler & Wells, 1909, 8vo. Edmond Duchatel, *Enquête sur des cas de psychométrie. La vue à distance dans le temps et dans l'espace* (preface by J. Maxwell), Paris, Leymarie, 1910, 8vo.

Since then psychometry has been much extended. On any object being given to a sensitive, many curious details are furnished concerning the persons to whom it belonged; and under these conditions fine examples of lucidity are observable. The magnetizers of 1820 to 1850 experimented in this manner, and their superiority to Buchanan lies in the fact that they did not use the word "psychometry."

Despite the lucidity so often observed it is not proved that the presence of the object is indispensable. Just as it is not at all certain that the so-called transmission of thought is anything but cognizance of a real fact, *known because it is real,* so also it is not certain that contact with a given object is necessary to the metapsychic cognizance of that object. Cryptesthesia (the reality of which cannot be denied), is almost as readily exercised without material contact, as with it.

Nevertheless it is possible that things, despite their apparent inertia, may emit some (unknown) vibrations that arouse cryptesthesia (though to imagine such is scarcely a presentable hypothesis), and we are reduced to somewhat pitiful conjectures as to what the forces that awaken the faculty can possibly be.

"The seas are still disturbed by the track of Pompey's vessels." Certainly, but how many others have disturbed them! Whenever we speak of cryptesthesia we can only speak of the fact itself. It is a fact, but we can define neither its modalities, its conditions, nor its limits.

"Clairvoyance," says Delanne, "is a faculty that certainly exists, but to seek to explain everything by it is to transgress logic and scientific method," and he adds, "It obeys laws and is manifested under determinate conditions."

That is so, but we are entirely ignorant what these laws may be. They are not, alas! determined as yet—whatever M. Delanne may claim. We know that some persons are more endowed in this respect than others, and perhaps the faculty to some minute extent is not entirely lacking in anyone. We know that some subjects are slightly sensitive, and others very much more so. We know that cryptesthesia is developed by hypnotism, that mediums in spiritist séances show it much more strongly still, and that with powerful mediums it becomes wonderfully intense; but that is about all that we do know.

How did Gallet foresee the number of votes that Casimir-Périer would obtain four hours later? How did Thoulet read the tele-

gram that would be sent to his friend two days later? It is just as hard to understand, neither more nor less obscure as how Mrs. Piper could know so well everything relating to George Pelham. When we speak of lucidity, clairvoyance, premonition, and cryptesthesia we are dealing with a faculty that is quite unknown to us, and we can only see its results; its conditions escape us entirely.

Mrs. Green, in London, sees two girls drowning in Australia, and their hats floating on the water. Mrs. R., in Paris, alludes to the deaths of Panca's children—the family that the Serbian officers are just about to assassinate in Belgrade. We can formulate no sort of explanation, and similarly we do not see what possible mechanism can awaken cryptesthetic sensitiveness. Appearances point very strongly to the inference that mediums in some trance conditions are inspired by a guide temporarily incarnate in them (I use the language of spiritualism without implying the least concurrence in its doctrines), and phenomena of cryptesthesia sometimes become extremely marked.

With reference to psychometry it is impossible to state accurately what part the object held by the sensitive plays in the result or in the sensation produced in her. Mrs. Thompson, in the experiment given *ante,* taking my son's watch into her hands, says, "Three generations mixed," but this in no way proves that this cognizance of the past is due to vibrations stored up in the watch. Mr. Dufay has described how Maria B. in hypnotic trance, on being given an object that had belonged to a murderer, described the murder. But was the object indispensable?

Miss X. related to the *S. P. R.* (*General Meeting,* May, 1895, *J. S. P. R.,* v, 247), that some papers were shown her that seemed of no special significance, but that she felt an intense reaction of blood and horror. The papers had been taken on the battlefield of Sédan. Mrs. Piper on many occasions after handling locks of hair or other objects has given precise particulars of the persons to whom they belonged.

I now select from among many others an excellent example of pragmatic cryptesthesia given by Mrs. Piper to Sir Oliver Lodge. "A chain was handed to 'Phinuit' by me, the package having been delivered by hand to me the previous evening. I had just opened the package, glanced at the contents, and hastily read a letter inside, then wrapped it all up again. The chain had been sent by Mrs. John Watson from Sefton Drive."

Mrs. Piper said, "This belongs to an old gentleman passed out of the body—a nice old man. I see something the matter with the heart. . . . Give me the wrappers, all of them."

The papers (wrappers) were given her, the letter among them. Medium held them to the top of her head, gradually flicking away the blank ones. She did not inspect them. "Is there J. N. W. here? Poole. Then there's Sefton, s-e-f-t-o-n, Pool, hair. Yours truly, J. N. W. That's it, 'I send you some hair.' Poole J. N. W. Do you understand that?" Sir Oliver says, "I found afterwards that the letter . . . contained the words 'Sefton Drive,' and 'Cook' so written as to look like Poole. It also said, 'I send you some hair' and finished 'yours sincerely J. B. W.,' the B. being not unlike an N." (quoted verbatim from *The Survival of Man,* p. 178).

E. Bozzano has studied the possible part of psychometry in the experiments with Mrs. Piper[1] and he thinks, with good reason as it seems to me, that neither telepathy nor cryptesthesia accounts for everything in those experiments. He concludes that the spiritualist theory alone covers all the facts. But why go so far? Would it not be wiser to say with me that an unusual faculty of cognition exists? It is incautious to go beyond that by referring to its cause and mechanism.

A commission of enquiry of the Society of Psychic Sciences (of Paris), examined four psychometrists, of whom M. Phaneg[2] was one; the report drawn up by M. Warcollier states that the results were poor.

I am not aware of any systematic studies on individuals who are neither mediums nor hypnotizable.

The handling of objects in this manner has been commonly practised by all professed somnambulists, and appears to be one of the conditions of their lucidity. The whole question is to know what purpose is served by the thing handled and on this we know nothing at all. It is not absurd to suppose that the object emits vibrations that can put the faculty in motion. This special form of cryptesthesia is possibly connected with another singular property of some bodies to emit vibrations which affect the nervous system and produce strong reactions without any known chemical or physical cause. It cannot be denied that some apparently inert

[1] *Télépathie et psychométrie en rapport avec la médiumnité de Mrs. Piper, A. S. P.,* November, 1911, xxi, January, 1912, xxii, 9-15.

[2] *Enquête sur la Psychométrie, A. S. P.,* 1911, xxi, 203-210.

substances are capable of moving some human sensibilities. The fact of the divining-rod establishes that. It will be seen later that it is now demonstrated that there is a *rhabdic* force that acts indirectly by provoking subconscious muscular contractions and causes the bending of the rod. It can be explained only by the radiation of some unknown power—a rhabdic force. Since this power exists it is reasonable to suppose that its manifestation may not be confined to acting upon "dowsers" with the rod actually in hand.

The influence of chemical and other bodies has often been studied ever since Reichenbach and the metallo-therapists; but we will set aside those experiments to account for which electric or magnetic forces may be alleged.

Drs. Bourru and Burot have studied the action of chemical substances enclosed in well-stoppered flasks; but in spite of the care with which these distinguished physicians have conducted their experiments, it does not appear certain that the very distinct effects produced may not have been due to verbal suggestion and expectant attention.[1]

Messrs. Bourru and Burot experimented with hypnotizable subjects showing all the phenomena of the major hypnotism. Such subjects are extremely amenable to suggestion. If a hermetically sealed tube of laudanum is placed in their hands with the injunction "Attend now" they will show strong physiological reactions, without, however, justifying the hypothesis that vibrations from the drug have traversed the glass. The hypothesis of suggestion can be eliminated only by proving that the effects are specific, such as sleep from morphia, vomiting from an emetic, convulsions from strychnine, intoxication from alcohol; then, when the physiological effects are so sharply defined, the experimenter, if himself ignorant at the time of the experiment of the contents of the tubes, may refer the action to the drug.

This diagnosis, necessary to the inference of specific action apart from all verbal suggestion, has not been made with sufficient precision. In a few cases I have tried this experiment with vague semblances of success, but am unable to draw any conclusions. In fine, Bourru and Burot have observed some very

[1] *La suggestion mentale et l'action à distance des substances toxiques et médicamenteuses,* 1 vol., 12mo, Paris, J. B. Baillière, 1887. See also *Revue philosophique,* March, 1886. E. Alliot, *same subject,* Paris, J. B. Baillière, 1886.

strong and singular physiological effects, but these are possibly to be explained by suggestion.

M. Wasielewski tried the same on Mlle. de B., and the experiments were quite successful when odoriferous substances like peppermint and brandy were used; so that I am quite satisfied that the success was due to hyperesthesia of the sense of smell. Whatever care be taken in closing a bottle with cork it is impossible that there should be no trace of scent perceptible to a super-acute sense. With four inodorous substances—quinine, distilled water, citric acid, and saccharin—the two former gave failures, the two latter successes (*A. S. P.*, July, 1914, xxiv, 193).

Miss Edith Hawthorne has reported a good case of pragmatic cryptesthesia. Mr. Samuel Jones sent her a fossil found by a miner in a coal-pit. The father of this miner had been killed in a mining accident. Miss Hawthorne says she had a horrible vision of a dead man prone on the ground with blood issuing from his mouth and nose. Other interesting, but vague, indications were given on the numerous objects sent by Mr. Jones.

M. Pagenstecher (of Mexico) undertook some researches on Mrs. Z. that seemed to him to indicate hyperesthesia so strong as nearly to be cryptesthesia.[1] But before pronouncing definitely, further details must be awaited. The case seems to be confirmatory of cryptesthesia under hypnotism.

These sundry results are not very satisfactory, though they may well induce those who have good hypnotic subjects or mediums at their disposal to make further experiments. The matter is not exactly metapsychic, but it is possible that the action of substances at a distance may throw some light on the metapsychic phenomenon of cryptesthesia. The action of metals, magnets, and toxic substances exerted at a distance seems well worthy of re-examinations.[2]

Is it necessary to mention under pragmatic cryptesthesia the superstitions on amulets, mascots, and the like which savages and even some civilized men regard as protective? The old

[1] *A Notable Psychometric Test, Am. S. P. R.*, 1920, xiv, 386-418.

[2] *Loc. cit.*, p. 240.—On the origin of metallo-therapy and on the action of metals from a distance which do not belong to metapsychic science, see V. Burco. *Etude expérimentale sur la métallothérapie et la métalloscopie*, Rapports faits à la Société de Biologie, 1877-1878, 8vo, Paris, 1876. J. Moricourt, *Manuel de métallothérapie et de métalloscopie, appliquées au traitement des maladies nerveuses, etc.*, 12mo, Paris, 1888. Dumontpallier, *Métalloscopie et métallothérapie. Union médicale*, Paris, 1879, xxviii, 333, 381, 421, 457, 473, 567.

magnetizers believed firmly that water and other things might be magnetized to give peculiar virtues; but they did not eliminate suggestion. I can quote a personal experience which is a very good instance. One of my pupils, Dr. Mar . . . a very trustworthy young man, simple-minded, honest, and very sensitive in his feelings, some weeks after taking his degree came to me saying that he was haunted by ideas of suicide that gave him great distress. He said, with tears in his eyes, "I am sure I shall end by suicide; can you not save me?" There was no reason of love, money, or health that would justify these gloomy anticipations. A happy idea struck me: I had on my table a little bronze figure of the Knight of Death, with the raised visor showing the face of the skull. I said, "Take this statuette, it has magic powers and will protect you." He thanked me effusively and came to see me six months later completely cured, happy and smiling and quite free from suicidal thoughts. He died a natural death some years later.

Was this coincidence? Is it not rather suggestion? In any case I am not so childish as to impute some actual influence to the Knight of Death. It seems to me that amulets, mascots, bits of coral, etc., act by suggestion alone. But suggestion is not to be neglected, and, after all, who knows? It is well to be as cautious in our denials as in our affirmations.

If there were even a shadow of proof of the efficacy of charms and casting of lots, these would be connected with influences proceeding from things. Of all popular superstitions these are the most universal; there are still many countries in which sorcerers and witches, maleficent objects, unlucky stones, the evil eye, and other trash are believed in. If, however, inert objects are inert only in seeming it is possible that some may be favourable and some the reverse; but in this domain there is nothing, up to the present, worthy of attention, and we must leave belief in black masses and wax figures for wizardry to the contemporaries of Catherine de Medici and Mme. de Montespan. The witty and erudite writings of A. de Rochas on charms may be consulted in his book, *De l'Extériorsation de la sensibilité*.

But, I repeat, even in dealing with absurd superstitions, it is well to be cautious in our negations. If we admit (as seems proved), that there is sometimes an emanation from things that acts on the faculty of cryptesthesia, it is not absurd to think that there may be some vibration proceeding from them that may

act on our own mentality or that of others. Events are so closely linked that anything is possible.

But we must not give ourselves up to such dreams; even if we admit possible connection between such and such an object and such and such an event, we are absolutely ignorant what that connection may be, and the mystery remains as inaccessible as if there were no connection.

Cryptesthesia in sensitives is helped by external conditions. Professional somnambulists, who are occasionally lucid, for if they did not now and then show real lucidity, they could not succeed in their curious trade, frequently make use of cards to fix their lucidity. It would be madness to fancy any relation other than chance coincidence between the card and the fact; but it is not insane to suppose that "laying the cards" is a preparation for lucidity. A well-known fortune-teller admitted as much to Dr. Osty.

Cheiromancy is a little nearer to sane physiology, for no one denies that hands are quite different in different persons, and that hands, like faces, betray something of the psycho-physiological constitution, vaguely indeed but quite certainly. It is a long step from past to future events; the hand of a duchess may easily be distinguished from that of a cook, but that is very commonplace. Nevertheless palmists claim to read the lines of the hand.[1] If there are sometimes remarkable forecasts, these must be put down to chance, or to lucidity stimulated by an external fact; the external fact in this case being the scrutiny of the hand by a sensitive.

Graphology resembles cheiromancy in some respects; but it has an unassailable physiological basis that has nothing to do with metapsychics. Our gestures, and therefore our handwritings,

[1]Voyez Desbarolles, *Les mystères de la main,* Paris. Garnier d'Arpentigny, *La science de la main,* Paris, 1857. E. Magnin, *Journal du magnétisme et du psychisme expérimental,* December, 1911. I will cite also a book which is curious if only for its title: Höping, *Institutiones chiromanticae, oder Kurtze Unterweissung Wie man aus denen Linien Bergen, und Nägeln deren Hände, auch das Jahr, Monat, Wochen und Tage in welchen einem was Glück oder unglückliches bevorsteht, muthmaslich judiciren kann, sampt einer gantz neun und ausführlichen Harmonia oder Uebereinstimmung aller Linien auch ausführlichen Abmessung der Saturninae, des Berges Lunae, und anderer Berge, mit Fleiss verfestiget,* 3d edit., 8vo, Iéna, 1681. See especially N. Vaschide, *La psychologie de la main,* Paris, 1909. Chéiro's *Language of the hand: Complete practical work on cheirognomony and cheiromancy containing the system, rules, and experience of Cheiro* (Comte de Hamond), New York, Tennyson; London, Nichols & Co., 1897, xv, 162 pages, with 32 plates.

correspond to feelings and characters. A drunken man will show his intoxication by his writing, and it will be different again according as he is excited or quiet. A very stupid person must inevitably show some trace of stupidity. Dull and intelligent persons cannot have the same handwriting: *Quid mens ima ferat scripto tua dextra notabit.* But all this has nothing to do with metapsychics, and if sensitives such as Mme. Freya use graphology, that is doubtless to aid their lucidity. A letter sent to a graphologist will show him many psychological traits of the writer, if he has studied a great many handwritings, but lucidity does not come into the matter.[1]

To cover the whole ground astrology should be mentioned. It was in great honour in former times, but has no serious meaning although some enigmatical journals (*Nouveaux Horizons*) still advance obscure arguments in its defence.

We are, when all is said, still entirely ignorant what are the conditions that determine cryptesthesia. We cannot even say anything that would be a beginning of scientific treatment, e.g., that external objects have some motive power to produce a cryptic sensation which by association of ideas awakens remembrances, just as a scent may recall memory of the person who used it. We must resign ourselves to ignorance of the means whereby the faculty of cryptesthesia is stimulated to action.

(b) Transfer of Sensibility

There are cases in which tactile sensibility, greatly enhanced, seems to play a part.

A physician of Lyons, Pététin[2] (1774-1808), more than a century ago observed the phenomenon of transposition of the senses (the phrase is used here without implying any hypothesis).

[1]On graphology see Crépieux-Jamin's *L'Eriture et le caractère.* There is in France a good journal on graphology, issued by a society which has the good sense not to mix up metapsychics with this fragment of normal psychophysiology. My experiment with H. Ferrari and J. Héricourt (*Revue philosophique,* 1886) has remained classical. With two hypnotizable persons both entirely ignorant of graphology, we obtained complete transformation of the handwriting and its adaptation to that of the new personality created by hypnotic suggestion.

[2]Pététin, père, *Electricité animale. Catalepsie hystérique ancestrale, Découverte du transport des sens, dans l'épigastre à l'extrémité des doigts et des orteils.—Rapports du fluide nerveux, principe de ce phénomène, avec le fluide électrique. Expériences qui les confirment* (Lyons, 1808).

He verified facts of hyperesthesia, or rather of cryptesthesia, in serious cases of hysteria, and gives full details in the curious phraseology of his day. The observations seem to have been taken with precision.

The supposed auditory anesthesia must be put aside, for the deafness was only apparent; the patients heard nothing when spoken to at their ears but heard whispers at their finger-tips or at the pit of the stomach. This insensibility to words at the ear is one of those negative hallucinations that have been verified by modern investigations on somnambulists.

It is not the same with regard to visual sensibility; the transposition of the sense is obvious. Pététin thus expresses himself (p. 44). His patient was a Mme. A., aged nineteen, in a cataleptic, i.e., in a somnambulic state:

"I slid under the bedclothes a card that I kept covered by my hand and placed it on her stomach. . . . Her expression changed, showing attention, surprise, and pain. 'What illness has come to me? I see the queen of spades.' I withdrew the card and showed it to the spectators; they turned pale on seeing the queen of spades. I placed a second card with the same precautions. 'The ten of hearts,' she said. A third card was met with 'Hail to the king of clubs.' I was quite upset and hardly remarked the consternation on all the faces round me."

Like the hysteric of Tamboff, the hysteric of Lyons distinguished by her fingers the taste of a cake, apricots, roast mutton, bread-and-milk, and boiled beef. But were all the conditions fully noted?

On the other hand, Mme. A. seems to have shown phenomena of cryptesthesia and premonition that transference of sensibility does not account for. She recognized objects in closed boxes. "If a thought were unexpressed in words, she knew it forthwith and proceeded to act as had been intended she should."

On another hystero-cataleptic patient, Mme. de Saint P., aged twenty-four, the results were less decisive; and, moreover, Pététin did not take the precautions that we now know to be necessary. There were some interesting phenomena, but they are not reported with sufficient accuracy.

The first observation is remarkable, the phenomena being strikingly identical with the Tamboff case; but we are now less easy to satisfy on the metapsychic nature of phenomena than they were in 1830.

Perhaps Mlle. Pigéaire, a very lucid somnambulist, had sensitiveness of this kind. She read a sealed letter placed on her forehead.

Experimenting with the Misses L., on mental suggestion from the one sister to the other, Sir Oliver Lodge remarked that the phenomena (reproduction of a drawing) were much more distinct when contact was maintained, even when the fifth fingers were barely touching, than when contact was broken.

Boirac[1] has given a notable case of reading by tactile hyperesthesia. Mme. V., a somnambule, had her eyes well bandaged and in addition paper was gummed over her eyes. She read small print without hesitation, and told the time from a watch wrapped in a handkerchief. This was reported by Dr. D. G. to Boirac, who determined to experiment with another subject supervised by himself. This subject, Ludovic S., succeeded in reading with his finger-ends as if there were exteriorization of sensation. One reading was given in complete darkness, all light being excluded from the room, Ludovic's eyes being bandaged as well. "It seemed to me impossible to doubt," says Boirac, "that this phenomenon must be referred to touch alone, sight having nothing to do with it."

E. Boirac made another experiment with still stranger results. He seated Ludovic near him but with his back turned and his eyes bandaged, and himself sitting close by, he asked Ludovic to hold his elbow. Then Boirac, passing his finger-tips along the lines of a newspaper, Ludovic read the words. The result was the same when Boirac closed his eyes and could no longer see the words that were under his fingers.

Further research should be made on this tactile hyperesthesia which might permit of the conclusion that the sense of touch sometimes becomes so acute as almost to become cryptesthesia.

We cannot here take into consideration the surprising researches, as yet incomplete, by Louis Farigoule. *La vision extra-rétinienne et le sens paroptique* (*Nouvelle Revue française,* 1920, 104).

Very notable cases of cryptesthesia, possibly explicable by extraordinary acuity of sight and touch, have been noticed by

[1]E. Boirac, *La psychologie inconnue,* Paris, Alcan, 1908, p. 245. *Un cas d'apparente transposition des sens.*

Dr. A. N. C. Chowrin, director of the lunatic asylum at Tamboff.[1]

The subject was a woman of thirty-two, cultivated and intelligent, unmarried and suffering from hystero-epilepsy. Dr. Chowrin was led to examine into her case because one day having received a letter in his presence she kept turning it over in her hands without opening it, and began to weep, saying that there was bad news in it. The letter announced the death of a niece.

Several ingenious experiments were then devised. Dr. Chowrin, fully acquainted with the tricks of hysterical patients, took strict precautions, assisted by his colleagues of the Medical Society of Tamboff. Sealed letters written in characters so small as to need a lens, and covered with aniline black, sometimes enclosed in photographically sensitized paper, were read about forty times, and Dr. Chowrin adds, "If M. can open these letters and reseal them so as to leave no external trace on the envelopes and the unexposed sensitive paper, that is as extraordinary as being able to read unopened letters."

In another set of experiments the same subject, M., read hermetically sealed letters in the presence of several persons. Sometimes the contents of the letter were given textually, sometimes by figures of speech giving the sense. For instance, in a letter written by Dr. Andreoff, the words actually written were, "In the sands of Arabia stand three palm-trees between which there flowed a murmuring stream." M. said, "An open space; it is sand, white like snow but it is not snow; three tall trees; I never saw any like them; few leaves but large ones, and a spring of water whose murmur I hear distinctly."

In another experiment, Dr. Troitzki wrote on a piece of paper, "Sophie Alexandrovna is in bed and looks at the wall," and folded it sixteen times. That day Sophie Alexandrovna (Mme. M.) was in bed with a toothache. She took the paper, held it in one hand, and said, "I see a bed, it is I who am in bed, with a bandage on my chin," and she looked fixedly at the wall. Troitzki and Speranski, both present, never lost sight of the paper for a moment.

Other facts were very significant; Mme. M. could distinguish colours by touch. Before the Medical Society of Tamboff she

[1]These were published in Russian, in 1898. I know them only in the German translation by A. de Schrenck-Notzing, *Experimentelle Untersuchungen auf dem Gebiete des raümlichen Hellsehens, der Kryptoscopie und inadaequaten Sinneserregung,* E. Reinhardt, München, 1919, 80.

was able to tell the colours of thirty flasks, all different, wrapped in paper and placed under a thick cloth. She could taste by the sense of touch. Small pieces of paper were soaked in solutions of soda, common salt, hydrochloride of quinine, sulphate of zinc, placed under her armpit, and she at once perceived the salt, acid, astringent, or bitter taste. As the experimenters did not know which solution was used, all mental transmission and experimental error are eliminated.

The experiments of Gilbert Murray on telepathy which seem wonderful, but are only apparently so, must be explained by extreme auditory hyperesthesia.[1]

Mr. Murray left the sitting-room and went into an adjoining one. Then someone in the sitting-room, usually Mr. Murray's eldest daughter, spoke some words that were at once written down, indicating a picture, a gesture, a scene, or an event. Mr. Murray then returned and said what had come into his mind; his words being compared with those spoken by Miss Murray. The agreements are striking, and it is needless to give instances of unquestionable facts. Nevertheless, as Mrs. Verrall has said, it is possible to explain all, or nearly all, by auditive hyperesthesia. Mr. Murray was in no way conscious of having heard anything; so that we are here dealing with subconscious auditive hyperesthesia, a very curious phenomenon that ought to be thoroughly studied. In any case, hyperesthesia pushed to such lengths is very surprising and little removed from cryptesthesia. Sometimes, moreover, the words pronounced by Mr. Murray, when compared with the thing spoken of, went much further than the words spoken aloud by Miss Murray.

These facts are insufficient to make the case one of cryptesthesia, but there are so many other instances of metapsychic cryptesthesia that it is not impossible that this may have come into play here, though I prefer the hypothesis of extreme acuity of hearing.

Visual hyperesthesia, no doubt, is in play in the case of M., a hysterical patient under the care of Dr. Frigerio[2] in the asylum

[1]See the address by G. Murray à la *S. P. R.*, July, 1915, and Mme. Verrall, *P. S. P. R.*, xxix. See also S. M. Kingsford: *Psychical Research for the Plain Man*, London, Kegan Paul, 1920.

[2]*Rari fenomeni osservati in una ipnotizzata ed in particulare della suggestione reciproca e della lettura ai occhi chiusi da essa presentati.* (*Arch. di psichiatria, etc.*, Torino, xv, 1894, 101).

at Alexandria. When her eyes were closed by fingers pressing on her eyelids, she read at once the titles of books; and in a dull light with her eyelids closed as before, she read the handwriting on a post-card. With a book held so high that it would have been impossible for her to read it even had her eyes been open, the same results were obtained. But this case of retinal hyperesthesia was not studied with the same precision as Chowrin's cases.

Dr. Naum Kotik[1] secured some good instances of cryptesthesia with Sophie B., a young girl of fourteen. Her father was an inebriate who finally committed suicide in an asylum. When this man was present, though no one could detect a word or gesture to indicate anything, Sophie could guess her father's thought in a surprising manner; but these experiments cannot be taken into serious consideration, for deception is too easy; though occasionally, in her father's absence, Sophie was able to tell the thought of Dr. Kotik. Here are some examples:

Dr. Kotik's thought.	*Sophie's answer.*
Spitschka.	Spitschka.
Noshik.	Noshik.
Plessimeter.	Instrument like that used by glass makers.
A coin.	A button, a coin.
Patron.	A Pa...da...
Bulewka.	Bulawka.
Noshnizy.	Noshik...Noshiry.

(The Russian words signify matches, a knife, scissors, gum, a ring, etc.)

The experiment succeeded even when Sophie, the percipient, was separated from the agent (her father or M. Kotik) by a closed door.

Dr. Kotik concludes absolutely for mental transmission; he even goes so far as to indicate its laws, saying that it is mainly transmitted in a phonetic form and loses some of its energy in passing through a wall.

He made some further experiments with Lydia W., a girl of

[1] *Die Emanation der psycho-physischen Energie,* Wiesbaden, 1908.

eighteen, well educated, and an automatic writer. The proofs of spiritist cryptesthesia were many. To cite one only:

Dr. Kotik's thought.	*Lydia's answer.*
Lumière.	Lumière.
Baiser.	?
Neige.	?
Daprer.	D'après.
Cheval.	Cheval.
Journal.	Journal.

There was always a phonetic resemblance between the thought and the word indicated, even when Lydia was making a mistake.

This transmission, however, might be visual, for in another series of experiments, Dr. Kotik looked at a post-card that Lydia could not see, and she wrote automatically a description, sometimes very accurate, of what the card contained. It would seem that this mental transmission was improved when agent and percipient were linked by a wire.

Finally Dr. Kotik tried fixing his thought (of an object, a landscape, or a sentiment) on blank paper, giving the blank sheet to Lydia to guess what his thought had been. The results were astonishing. I will give one instance only.

Dr. Bernstein thought of a landscape—the seashore, a boat with people in it; on the shore a building surrounded with verdure. Lydia saw—"A sheet of water like a mirror; on the shore some houses surrounded by trees; a boat on the water." Chance cannot account for this, though there was some sameness in the pictures to be guessed, the similitude between the image mentally impressed on the paper and that seen by Lydia is too marked.

Dr. Kotik draws the following inferences: Thought is a radiant energy. This energy has physical and psychic properties. It may be called psycho-physical. Originating in the brain, it passes to the extremities of the body. It is transmitted through air with some difficulty, more easily through a metallic conductor, and can be fixed on paper.

According to him there are two conditions to be considered: the sensitiveness of the subject, and the vibratory energy that sets the sensitiveness into action. This vibratory energy was specially studied by Dr. Kotik, but it does not seem distinctive of human thought; it is possible that all things radiate certain vibratory energies, since sensitives indicate not only the things

of which someone has thought, but also inert objects apart from any thought. It seems more cautious to adopt no hypothesis other than that of a special sensibility that enables hypnotized persons and mediums to *know that which exists,* whether a thought or an object. This may possibly be due to their very strong subconsciousness.

Dr. Rudolph Tischener[1] has recently published an important work on lucidity. I shall not enter upon his theoretical disquisitions, the time is not ripe for them, and all such are distressingly frail, but will keep to the facts recorded. Dr. Tischener cites some very remarkable ones.

After having experimented with Mme. de B., who gave some good instances of cryptesthesia to Wasielewski, Dr. Tischener tried a man of thirty-two, named Re., the son of a postal employee, and himself in business. Several words were written out of Re.'s sight, folded, and put into a sealed and opaque (*lichtdicht*) envelope. (What was the degree of opacity?)

The results of many experiments were remarkable. There could not be transmission of thought, for several of these sealed envelopes were shuffled together, and Dr. Tischener did not know the contents of those handed to Re. Out of 68 trials 24 gave negative results; but this is of no import, for in the 44 that succeeded coincidence is quite impossible as an explanation. Athen for Athen, Barbara for Baelbara, Eberhard for Ebarhard, Madalene for Madelene, and Pater for Dater.

Albert Hofmann (of Mehlen)[2] made some curious experiments in telepathy with a Dr. Freudenberg. M. Hofmann had been the percipient in some of Tischener's experiments; in this case he acted as agent, living in a house thirty yards distant. Experiment 1: Hofmann suggested *Alaof Köln* and Freudenberg said Köln. Experiment 2 failed. Experiment 3, Hofmann suggested *Groenendael,* and Freudenberg saw a pretty wood with ponds which agrees with the wood of Groenendael near Brussels. In a later series of experiments the agent and percipient were in separate houses 800 metres apart; the transmission of colours and visions were both very distinct. The word "encrier" (inkstand) was transmitted and among others a very strange one: Freudenberg suggested Julius Cæsar; Hofmann thought of the bridge at Bonn where there is a statue of Julius

[1] *Über Telepathie und Hellsehen, München,* Bergmann, 1920.
[2] *Versuche über Telepathie* (*Psych. Stud.,* January, 1921, 1-12).

Cæsar. Unfortunately after these successful trials there was a series of failures.

It is useless to multiply instances. It is not chance; it is not telepathy. Is it retinal super-acuity pushed to the point of cryptesthesia? Or was there some experimental error by which Re. might have seen what Tischener wrote? I do not suppose this to be the case, for Dr. Tischener is well acquainted with possible sources of fraud described by American psychologists.

Dr. Waldemar de Wasielewski[1] has reported some cases of pragmatic cryptesthesia which are akin to dowsing experiments. Mlle. von B., observed by him under conditions excluding fraud, was often able to state the nature of objects enclosed in boxes well tied with string, to say whether they were of wood or of what kind of metal. In the very imperfect statistics that he gives there were 6 failures in 50 experiments. But we ought to know what was the mathematical probability of success. He also made some experiments on drawings and words enclosed in boxes. The details must be read in the original. Dr. de W. wrote in reversed order and Mlle. de B. read as though not reversed; the writing in this instance being in an envelope and not in a box. Dr. de W. thinks, with good reason, that an influence proceeding from the things, rather than telepathy, is in play—that mysterious rhabdic force which, proceeding from subterranean water or metals, causes the muscles of the dowser to bend his hazel rod.

M. Warcollier, a chemical engineer, has made numerous and very methodical experiments on telepathy, not yet published. He has kindly permitted me to see his manuscript. Some of these are on drawings, with himself as percipient, and are very interesting. Among ten experiments, one (the fourth of the series) was extraordinarily successful; the drawing was of a dirigible balloon with a screw; the reproduction was also a dirigible balloon with a screw. Other trials were half successful; the drawing being a tricolour flag, nine successive sketches were made, a tricolour flag being one of them. Experiment No. 8 was on a drawing of a curved hunting-horn; among 5 sketches one was of a snail shell resembling a hunting-horn. The tenth was a parrot; the percipient among his 12 sketches drew a wounded bird falling to earth. Summing up his experiments, M. Warcollier states that out of 35 trials, 13 were negative, 5 must be

[1] *Un cas de lucidité spontanée, A. S. P.*, June, 1914, xxiv, 165.

eliminated by reason of coincidence that seems really due to chance, 10 were half successful, and 7 were complete successes. The mathematical probabilities are, however, difficult to estimate.

Comparing the different modalities of telepathy that M. Warcollier has studied by methods that would take too much space to detail here, he classifies the comparative facility of transmission as under:

Colours	70 per cent.
Attitudes	55 per cent.
Drawings	45 per cent.
Objects	38 per cent.
Ideas	37 per cent.
Mental images	10 per cent.
Words and figures	10 per cent.

This is an interesting attempt at classification which requires the fuller confirmation that can only be given by numerous experiments; and it is not easy to find those who, like M. Warcollier, are at the same time both sensitives and also competent to make exact calculations and analyses.

That M. Warcollier is a sensitive is shown by an instance of cryptesthesia happening to himself. Late one evening he went to the house of a friend in the country. He went to bed, fell asleep, and, partially waking up, he saw by the light of the night-lamp a large quadrangular corded package in yellow packing paper. He cried out, "What is that package?" Mme. Warcollier, waking up, was astonished, for there was no such package in the room; her husband then described the thing, which had in fact been taken to that room by mistake and had been left there some time before M. Warcollier's arrival, and then taken away.

M. Abronowski, quoted by M. Warcollier, out of 324 trials, the odds in each separate case being 1 to 3, had 157 successes, say 50 per cent., a total that greatly exceeds the probable number. In these experiments there was hand-contact, which takes away a good deal of their value. However, with one percipient more sensitive than the other, Jeanne Hirschberg, 62 per cent. of successes were obtained without hand-contact. Both M. Warcollier and M. Abronowski have advanced some timid hypotheses to explain telepathy. There is good reason for timidity; the hypothesis that brain A vibrates by transmission of the vibration of brain B is no adequate general explanation, for very often there is

lucidity without any vibration of brain B. Spiritualists have a simpler explanation—that the spirits are omniscient and omnipotent; but this is childish. I prefer to avow absolute ignorance what the mechanism and the cause may be.

Lombroso, quoted by Flammarion (*La Mort et son Mystère,* 1920, p. 255), reports the case of a young hysterical girl who sometimes lost the power of seeing with her eyes, but saw with her ears; she could read printed lines placed at her ears when her eyes were bandaged. On this transposition of senses Flammarion says that the subjects *wrongly* imagine that they see by their forehead, ears, or stomach. I should rather be inclined to think that, in certain cases at least, there is a real sensory impression on the skin which is perhaps tactile in character.

These instances of hyperesthesia or paresthesia are as unquestionable as the case of Ludovic S., reported by Boirac; but the manifold phenomena of cryptesthesia cannot be referred to superacuity of the senses; this explanation or by transposition of the senses is applicable only to a very limited number of cases; and even in them we cannot be sure that the explanation is correct. A retina capable of perceiving luminous rays that have passed through three sheets of thick cardboard is so different from the normal retina that the study of it belongs more to metapsychics than to physiology.

However, it is perhaps a step in advance to be able, even in some exceptional cases, to attribute some phenomena that seemed inexplicable to extreme acuity of the senses; and it will be very interesting to study this with sensitives. One never knows on beginning an experimental investigation to what unexpected and unhoped-for results it may lead.

C. Lombroso has stated some clear cases of cryptesthesia. He discovered a young commercial clerk called Regis, twenty-one years of age, and in experiments in which he was assisted by Drs. Ottolenghi, Sartoris, and Roncarini, he found that Regis could reproduce some of the experiments of Pickmann, but without contact. Lombroso wrote the word *Pitckerel* on a slate. Regis, ten yards distant, having his eyes and ears bandaged, wrote *Pitche* on another slate. He was given a drawing in an envelope, and he then (with bandaged eyes) made an astonishingly correct facsimile. There were some failures. Regis had on that day drunk a pint of rum and was very drunk, which is not a good condition in which to work a fraud. M. B. (of

Nocera), aged twenty, gave Dr. Grimaldi, with Lombroso present, some interesting instances of cryptesthesia.[1]

Other experiments on telepathy have recently been undertaken by Drs. F. H. Van Loon and A. Weinberg.[2]

As their memorandum has not yet been published in its entirety, no definite opinion can be expressed. Seemingly it favours telepathy, and emotional feelings seem to have been more readily perceptible than names, numbers, and figures. With cards there were failures. When one of the agents tasted sweets or hydrochloric acid the result was a success. (But were full precautions taken?) It is difficult to draw any conclusions from this laborious series of experiments initiated under some very doubtful notions drawn from "thought-transference" and the "willing game." The good faith of the percipients is unquestionable; but there may have been slight subconscious sensorial stimuli awaking vague perceptions, without any metapsychic influence. However honest the percipients may be, conditions must always be as severe as if they were under suspicion, for the subconsciousness is always on the alert, and grasps at the very slightest indications that may put it on the track. If the agent raises a weight and the percipient says that he feels fatigue, extreme precautions must be taken that the percipient, whose senses are hyper-acute, should have no means of knowing that a weight is being lifted behind him. All movement on the part of the agent must be absolutely eliminated before we can conclude that cryptesthesia is present.

The phenomena presented by Mr. Reese[3] must be referred to pragmatic cryptesthesia.

The facts which we shall now summarize have been recorded by very well-informed observers—Carrington, Schrenck-Notzing, and J. Maxwell—who experimented separately with Reese. Mr. Carrington has made a special study of prestidigitation, and is an experienced psychologist.

Mr. Reese was sixty-two years of age in 1913. He was a native of Posen in Prussian Poland, and then went to America,

[1] *Mon enquête sur la transmission de la pensée, A. S. P.*, 1904, xiv, 264-273.

[2] *A Method of investigation into thought transference* (*J. S. P. R.*, January, 1921, 3-23.

[3] A. Schrenck-Notzing, *Un clairvoyant, A. S. P.*, 1913, xxiii, 65. J. Maxwell, *Même sujet, ibid.*, 67. Carrington, *Compte rendu d'une séance avec Bert Reese* (*ibid.*, 357).

where he lived for many years. He tells of many interviews with prominent men, especially with leading American financiers, for one of his gifts was the ability to discover springs of water and also oil wells. He gave many striking instances of lucidity.

Edison reports experiences with Reese that seemed decisive to him. He went into a room far from that in which Reese was sitting and wrote, "Is there anything better than hydroxide of nickel for an alkaline electric battery?" He then returned to Reese, who at once said, "No, there is nothing better than hydroxide of nickel for an alkaline battery." Two years later Edison received an unexpected visit from Reese. Edison then wrote the word "Keno" in microscopic characters, and put the paper in his pocket. He asked Reese, "What have I written?" and Reese answered "Keno," without hesitation.

Dr. James Hanna Thompson, an alienist and an avowed sceptic, was absolutely convinced after a séance with Reese (*A. S. P.*, August, 1913).

Schrenck-Notzing declares that Reese is one of the most extraordinary men of the time. Schrenck wrote on five pieces of paper the questions: (1) What is my mother's name? (2) When will you go to Germany? (3) Will my book be a success? (4) An intimate question not detailed, and (5) What is the name of my eldest son? Reese, without touching, or barely touching, the papers answered four of the questions in as many minutes, and all idea of thought-reading can be eliminated, for Schrenck-Notzing, having mixed the papers, did not know the contents of the one presented.

With J. Maxwell equally surprising results were obtained. Reese did not touch the seven papers which Maxwell had written, but answered each though Maxwell did not know what each as given to Reese contained. The first name of Maxwell's mother (an uncommon one) was given with a slight error, Marie Angeline for Marie Angelie.

H. Carrington describes in great detail a similar experience; he notes carefully that the regular tricks of legerdemain could not be used, and after a very methodical investigation concludes the case to be one of genuine clairvoyance.

Mr. F. Hollaender gives another very interesting account of a séance that he had with Reese. According to him, Reese was able to indicate to a commercial firm the page on which there was a fraudulent entry. He was given 5 per cent. of the amount of

the fraud, this payment amounting to 2500 marks. He gave Mr. Hollaender accurate answers to personal, intimate, and special questions that Mr. H. had written in Reese's absence, and had kept in his pockets.[1] According to Miss Scatcherd, the same facts are confirmed by M. Drakoules.[2] The same experiment was made with the same success: M. Drakoules wrote various phrases on eighteen papers which he folded and placed in different drawers. Reese read them all while still in the drawers, and gave correctly the names of Mme. Drakoules's three daughters—Penelope, Anastasia, and Giuletta.

In 1916 Reese was convicted, in New York, of "disorderly conduct." On appeal he convinced the judge, Rosalsky, not only of his innocence, but also of his lucidity (*A. S. P.*, May, 1916).

The testimony of the able, sagacious, and cautious men above named leaves no doubt at all of the pragmatic cryptesthesia exhibited by Reese. It is a misfortune that he declines to submit to fresh tests.[3]

Another remarkable case of lucidity is given by Professor Schottelius, of Stuttgart; Ludovic H., a Jew, aged forty, gave similar tests. Schottelius, alone in his room, wrote on three papers what then came into his mind. He took one in his right and one in his left hand, clenched, and Ludovic read both. A judge of first instance, an alienist doctor, the medical councillor of the district, and a legal authority, all persons not to be suspected of credulity, made similar experiments with Ludovic (*A. S. P.*, March, 1914, xxiv, 65). I have very recently verified cryptesthesia in full force with Mr. O., a Polish engineer. At Warsaw, in April, 1921, Geley, Lange, and I had the opportunity of observing him with care, and we found that the marvellous accounts given of his powers were in no way exaggerated. After dinner one day Lange, remote from Mr. O., wrote some words on a scrap of paper and put it in an envelope, which he closed. Mr. O., crumpling the paper in his hand without opening the envelope, said, "It is written in English. I see one separate letter, then 'cons' and then 'vendredi.'" Mr. Lange had written, "I consider you are wonderful." This is particularly interesting

[1] *Encore le voyant Reese, le juif éternel, A. S. P.*, September, 1913, xxiii, 257-261.

[2] *International Psychic Gazette*, March, 1916.

[3] Max Hoppe (*Ueber Hellsehen, Diss. in.*, Berlin, 1916) has criticized these experiments with Reese, but his hypothesis that they are due half to chance and half to sagacity seems to me very feeble.

as it seems to indicate a visual perception rather than a reading of the thought.

The next morning, at the Hotel d'Europe, Mr. O. came to visit me. I wrote a phrase that came into my mind without there having been any conversation to arouse it, "The sea never appears so great as when it is calm. Its fury lessens it." Mr. O., standing in the middle of the room, could see nothing of what I was writing, and in any case could only have observed from afar and upside down. I folded the paper, put it in an envelope, and closed it. Mr. O. kneaded it in his hands feverishly without opening it, and after ten minutes said, "I see much water! much water! You want to attach some idea to the sea. The sea is so great that beside its motion . . . I can see no more." An admirable result, although extreme criticism might say that he might subsconsciously have partly seen what I was writing.

Such objections could not apply in the next experiment, which is more demonstrative despite some marked mistakes. I took two letters received the day before, and when alone in my room placed them in envelopes that I carefully closed. Taking one of them at random, whether it were A or B, I gave it to Mr. O. on his arrival. He then said, "It is a letter in French that does not come from Paris; it is an answer to a letter of yours. A man of fifty speaks of a lady whose name is German rather than French; he invites you to come where he is, at the sea-side; it is in his mind to go to Paris," and he added other details, some not characteristic, and some erroneous. He then said, "Keep that letter. M. Geley can give it to me tomorrow and I will finish reading it." The next day Geley, to whom I had given the envelope, still closed and without saying anything of the contents of the letter, got an immediate answer from Mr. O., "It speaks of a Mme. Berger. The letter is written by a man of fifty; it is an invitation; it comes from the sea-side." Now this letter, of which neither Mr. O. nor Dr. Geley knew anything, and of which nothing could be seen by normal senses, was from a German professor, R. Berger, at Berlin, in answer to a letter of mine, asking me to see him on my return (from Warsaw). He is about fifty.

Geley's experience was perhaps even better. He wrote on a visiting card, holding it on his knee under the table, "Nothing is more moving than the call to prayer by the muezzins." The card, still kept under the table, was put into a thick envelope, and closed.

Mr. O. said, "There is a feeling of prayer, a call, from men who are being killed or wounded. . . . No, it is not that. . . . Nothing gives rise to more emotion than the call to prayer, it is like a call to prayer, to whom? A certain caste of men, Mazzi—madz. . . . A card. I can see no more."

There were some other experiments equally astonishing, which I shall not detail, as we shall shortly have the opportunity of observing this cryptesthesia at the Metapsychic Institute with all necessary minuteness.

In short, cryptesthesia in these exceptionally gifted beings—clairvoyants—cannot be called in question.

(c) Crystal Vision

Vision by the crystal seems to be favourable to the development of cryptesthesia in sensitives. This method seems to have been used by magicians in all ages (the magic mirror).

Grasset (*loc. cit.*, 135-143) mentions the ancient methods of divination by the water of a spring (hydromancy) or by vessels filled with oil (lecanomancy) by which Ulysses enquired of Tiresias; or by mirrors, or crystal spheres. Sometimes a finger-nail covered with oil was used. In the sixteenth century Dr. John Dee showed a small crystal in which the future could be read. Saint-Simon tells in his memoirs how *a rogue* showed the Duke of Orléans all that he wanted to know in a glass of water.[1]

When a sensitive looks into the crystal, objects, moving pictures, and persons are often seen. Mrs. Verrall says, "The visions obtained by looking fixedly into a glass of water or a crystal ball differ from visual impressions; a certain amount of darkness

[1]A very detailed summary has been given by Miss X., *Recent experiments in crystal vision, P. S. P. R.*, May, 1889, v, 486-504. See also Adeline Fr. von May, *Visionen im Wasserglasse*, 1876. Hyslop, *Experiments in crystal vision, P. S. P. R.*, xii, 259. F. Myers, *Experiments in crystal vision, P. S. P. R.*, viii, 459. P. Janet, *On experiment in crystal vision, ibid.*, xv, 385. A. Lang, *On crystal vision, ibid.*, xv, 48-50. Fr. Myers, *De la conscience subliminale, A. S. P.*, 1897, No. 5; 1898, Nos. 2, 3, and 4; 1899, Nos. 3, 4, and 5; 1900, Nos. 1 and 2.

The Seeress of Prévorst sometimes saw whole scenes in soap bubbles blown before her.

Besides the writings of Fr. Myers, *Subliminal Consciousness*, consult P. Janet, *Automatisme psychologique*, and Andrew Lang, *The Making of Religion*, 1897, trad. et anal. par E. Lefèbvre, *A. S. P.*, 1898, viii, 129-148. Andrew Lang, *Dreams and Ghosts*, 1897. W. Stead, *Real ghosts*, 1897, 65-66. P. Joire, *Méthode d'expérimentation, etc., A. S. P.*, 1901, xi, 329.

favours the appearance of the images. These images seem to be made with the bright points in the crystal, and, once produced, they have a reality that no imagination can invent. Sometimes there is movement; sometimes I *know* that there is such and such a colour, though I cannot see it optically."

Miss A., who is not a professional medium, and whose name has not been published, thus describes her impressions: "I knew nothing about crystal vision, when one day, being at lunch with some friends, the conversation turned on this subject. They declared that visions could be seen in a glass of clear water. I looked and seemed to see a small golden key at the bottom of my glass. It was so distinct that I looked on the table-cloth, thinking it was really there." Subsequently Miss A., having made other experiments with a crystal ball, thus describes her sensations: The crystal is wrapped in black material leaving only a part open to the sight. The darkness does not matter. After one or two minutes a bright light appears which fades, becomes a fog in which landscapes appear, or letters, sometimes written reversed. The scenes are very interesting, sometimes having no connection with any real event.

According to Miss X., the things seen in the crystal have true colours; they are like remembered scenes but more distinct.

Mr. Hyslop has given some instances of crystal vision (*P. S. P. R.*, 1898, xii, pp. 259-276). These were obtained by Mrs. D. and were very distinct. He verifies frequent coincidence of the vision with real events, but does not think that chance coincidence can be disregarded. The instances are, however, so numerous and striking that they would seem to show true lucidity. In one case Mrs. D. saw, near her sister, a person unknown to her in a coffin, a friend unknown to Mrs. D. being then extremely ill in the sister's house. The patient was recognized among seven photographs brought by Mr. Hyslop (in this particular case the vision was in a dream, not in the crystal). In another case, by the crystal, Mrs. D. saw the cemetery, but different from what she thought it to be. The new arrangement of the tombs was really as she saw it, as she found on visiting the cemetery to verify the facts. This is possibly a case of paramnesia (believing that one remembers things not seen).

In fine, Mr. Hyslop concludes that crystal vision, in Mrs. D.'s case at least, does not give the certitude of supernormal cognizance that strict science demands.

The Rev. P. Lescœur (quoted by Grasset, *loc. cit.*, 140) states that he knew a woman who, on looking into a glass of water, saw *to her great surprise* an apparition of the head of Christ, expressive of great pain. "I drew back, with an exclamation of amazement; but on looking again the *Ecce Homo* face appeared in profile, then grew less distinct and vanished. It had lasted about a minute." This is a hallucination brought about by crystal vision, but has no connection with cryptesthesia.

Myers made a careful study of crystal vision, especially with Miss Freer. The subject is requested to look attentively, but not so as to produce fatigue, in a mirror or some transparent object, arranged so as to reflect surrounding objects or the face of the observer as little as possible. If a crystal ball is used it is surrounded with black material. It is best that the subject should be alone in the room and should be mentally passive. After ten minutes or so he sometimes sees that the glass or the crystal becomes dim and some object seems to appear in it or on it. About one person in twenty may succeed in this experiment, and among twenty seers, perhaps one only is capable of developing this faculty of internal vision sufficiently to receive veridical impressions that could not be obtained by normal means.

Crystal vision does not produce the major hypnotic sleep as has sometimes been affirmed. It seems to have no effect on health other than fatigue if the experiment is prolonged.

Few phenomena, Myers states, are so fantastical and improbable. The visions do not seem to follow any law; they are a mixture of remembrances, dreams, telepathic or telesthetic recognitions and precognitions. In short, crystal-gazing is an empirical method of arousing cryptesthesia; the mechanism by which this comes to pass is unknown.

Mrs. Leeds, whose husband is on night duty on the railway, wakes up suddenly in the night; she raises a glass of water from the night-table to her lips, and sees in the water the moving image of a railway train with a guard's look-out van at one end. She then sees the trucks hurled on one another, and the guard's van damaged. Two hours later, Mr. Leeds comes in and tells his wife that there has been an accident, the brakeman being badly hurt (*J. S. P. R.*, December, 1903).

Myers quotes (*A. S. P.*, 1901, xi, 297) the case of Miss A., looking into the crystal in presence of Sir Joseph Burnby; she describes a tall dark lady in the room of a hotel; the door is

open and she is about to wash her hands. Sir Joseph thinks of his wife. Miss A. adds, "She is wearing a serge dress with a great deal of braid on the bodice and a band of braid on one side of the skirt." Sir Joseph thinks that the figure cannot be that of his wife; but on returning to Eastbourne some days later he found that Lady Burnby had bought such a dress and that the description of her washing her hands in the hotel room with an open door was accurate. Miss A. did not know Lady Burnby, but some months later on seeing her entering a theatre said, "That is the lady in a serge dress that I saw in the crystal."

In certain cases, instead of looking into the crystal, a large shell is held to the ear, as children do "to hear the sound of the sea." This is another empirical method of arousing cryptesthesia. When Miss X. listens thus she hears confused noises, sometimes musical notes, or human voices speaking distinct words. One day she suddenly hears "Endsleigh Street," a name she does not know. A few minutes later she is told that Mr. H. has come to London from Oxford. "Is he living here as usual?" She was told no, he has taken a room in Endsleigh Street.

Another time Miss X. hears the words, "Are you a vegetarian?" as if pronounced by Mr. Smith whom she has just left; the fact being that Mr. Smith a few minutes later asked Mr. M., whom he had met by chance, "Are you a vegetarian?" The letter of enquiry addressed by Miss X. to Mr. Smith was written before she had learned that these words had really been spoken.

Vision in the crystal or hearing by a shell seems to be restricted to sensitives; it therefore does not pertain to cryptesthesia in normal persons, but only to sensitives. The phenomena are slight in comparison with those obtained at spiritist séances.

6. *Conclusions on Experimental Cryptesthesia*

Alike in normal persons, sensitives, somnambulists, and mediums, the fact of cryptesthesia is beyond question.

Even if we were to make the absurd admission that three-fourths of the reported facts are erroneous, there would still remain a series of verified facts that defy criticism and render it certain that there is a strange faculty of cognition in human beings that brings information which could not possibly be acquired by the normal senses.

It seems to me quite unscientific to attempt to fix limits to this

power, and to say that it will come into play on a given day or hour and under given conditions. Since this faculty of higher cognition exists (called "supernormal" by Myers), why not say, *Nihil a me alienum puto?* It has been shown that this faculty of cryptesthesia is not limited by time or space. Let us then use this discovery to denote the phenomena of monition, premonition, and clairvoyance that are so numerous and undeniable. It covers *nearly* all that seems so marvellous. As soon as it is certain that by any means soever human consciousness can be aware of the contents of a closed envelope, or of that which moves the emotion of a person near us, or of a distant friend who is thinking of us, I do not see what limits can be assigned to this power. In presence of any fact of subjective metapsychics, however marvellous, I dare not say, "This is beyond the power of lucidity."

Certainly cryptesthesia is very strange and we do not in any way understand it, but that is no reason for introducing gods, angels, demons, or spirits after the fashion of savages who ascribe natural forces to a fantastic divinity rewarding or tormenting poor mortals. It is hardly rational to call in the spirits of the dead. We recognize in cryptesthesia a higher human faculty as yet unknown by our intellect; we must stop there, *provisionally at any rate.*

We will, however, go a little further. In order that cryptesthesia should come into action, something in us must be moved, for every effect has its cause. There must therefore be some mysterious external vibration that acts on our organism. It is in this sense that cryptesthesia is necessarily pragmatic, for if there were nothing external to set it in motion, the mind could perceive nothing. But we are in absolute ignorance as to what that vibration may be; and in the present embryonic stage of metapsychics we shall not seek to discover it.

The important thing is the proven fact: that certain individuals at certain times are aware of facts, and receive impressions that cannot be referred to normal senses but which nevertheless agree with real external events. This affirmation is based on various proofs, which we will sum up at this point.

1. In making experiments of thought-transference or telepathy (which is only a particular form of cryptesthesia) it is found, even when experimenting with normal persons, that there is always a small excess of correct results over the number that

chance alone would give according to the calculus of probability; though this excess is not large enough for definite conclusions.

2. With hypnotized and hypnotizable subjects the divergence between the probable and the real number of successes is so large that the excess cannot possibly be referred to chance. Certain somnambulists give answers so precise, reproduce words, writings, and drawings with such exactitude and so abundantly, that the cryptesthesia, indicated by experiment with normal persons, becomes undeniable.

3. In spiritist séances, in which an external personality seems to dictate the answers, and especially with powerful mediums such as Mrs. Piper, the proof of cryptesthesia is overwhelming; though it is not possible to conclude, in any way satisfactory to strict science, that an intelligent external personality intervenes.

4. Experimenting with sensitives gives many instances of cryptesthesia, sometimes as striking as those with hypnotized persons and mediums.

5. Cryptesthesia is most frequently manifested in the shape of telepathy (thought-reading) but it also gives facts unknown to any person present. And now, as the mass of facts proves the existence of the faculty, we may make some attempt to understand it.

Let us suppose that no individual of the human race had the sense of smell. No one could have the least idea what a scent could be. Passing by a dung-heap or a field of violets we should be unaware of either if they were out of sight, they being neither visible nor making any sound. If, then, some exceptional individual should be gifted with the sense of smell, we should be enormously surprised, if when passing the unseen dung-heap or violets he could tell us, There is manure here, or violets there.

This exceptional individual could also, by his sense of smell, be aware of facts long past. If a grain of iodoform had been placed in a cupboard ten years ago, the scent of iodoform would still be perceptible; and if our exceptional individual endowed with transitory olfactory sense then said, There has been iodoform in this cupboard, what extraordinary lucidity we should consider it to be.

As it is, we find it difficult to understand the extreme acuity of smell with which some animals are endowed; for instance, how the males of certain moths are attracted from considerable distances by the odour of the female moth, and how a dog can track a hare

that has passed an hour ago. We are surprised, but we understand more or less that these cases are the hyper-sensitiveness of a faculty which we possess in a rudimentary state. If we were entirely destitute of this faculty we should understand nothing at all of the facts.

To return to the exceptional man who from time to time has some vague olfactory sense; if he cannot analyze his imperfect, rudimentary, and fugitive perceptions, he will find it very difficult to explain how he was able to say, There were violets on the right, and a dung-heap on the left. As his sensation is transitory, he will try to recall it, but in vain; he has said, "There are violets," but the scent has vanished, and he does not even know why he made the statement. This knowledge that he cannot account for has crossed his mind in a flash, and he has now become like to other men, having no olfactory sense. He does not even know what "a scent" may be. He only knows that he had the idea of violets. The more he tries the less he is able to say what made him exclaim, "There are violets near."

This, of course, is an analogy and nothing more; but it enables us to conceive how some vibrations from the external world may reach us and, by awaking confused and transitory ideas, may give us cognitions whose origins are unknown and perhaps unknowable. These ideas and cognitions are in the realm of the subconscious; the conscious self is hardly touched by them. Lodge ingeniously compares the conscious and the unconscious parts of the mind to a man who is swimming—his head alone is out of the water, but the rest of him is there, unseen all the while. It is probable that cryptesthesia is more especially manifested by those individuals whose conscious self is somewhat inactive. The subconscious movements of writing, with or without the planchette, are mostly produced when the conscious self is in a state of semi-somnolence. Unconscious sensations have then more hold and determine more precise movements than when the crowd of reasoned, voluntary, and purposeful ideas dominate the consciousness. Lucidity is more common in the hypnotic sleep that in the normal state, and monitions occur oftener in sleep than in waking hours because during waking life the exterior influences of our environment impinge strongly on our normal senses and prevent our perception of the unknown energies (probably much feebler) that move our cryptesthesia.

But whatever theory we adopt, cryptesthesia exists; in other

words, the human intelligence has modes of cognition that are unknown to us.

There is no ground for surprise, for the smallest reflection on the immense fertility of nature will reveal that there are forces unknown to us. No man of sense and intelligence can imagine that there are no forces in the cosmos but those analyzed in our text-books of physics. Since, then, there are unknown forces in the universe, it is possible that these may influence us; the whole crux of the matter is whether our being is now moved by them. To affirm that unknown forces exist is not to prove that cryptesthesia exists, but simply to demonstrate that cryptesthesia is possible.

It may be otherwise stated: There are forces that our normal consciousness does not perceive, but that are occasionally perceived by our subconsciousness. If it were proved that there are no forces in nature but heat, light, electricity, and gravitation we should be almost justified in denying cryptesthesia, but as soon as it is admitted that there are other forces—and that cannot be denied, whether they have or have not been described or discovered—then cryptesthesia becomes not merely possible but likely.[1]

Does this imply that the fact of cryptesthesia will revolutionize science and establish a new era in psychology, physiology, and physics? From the theoretic point of view this may be so, but practically, however interesting, it will only very slightly modify social life. It seems to occur so rarely and to need such special artifices in experimentation, that perhaps it plays but a minor part in the daily life of each of us.

Nevertheless it is probable that the external world that lies outside our normal perceptions—and in this I include the thoughts of other men—may influence our acts, our wills, and our feelings, because it acts continuously upon us without our being aware of it. Though always weak and vague, and often ineffective, the human thoughts and the unknown vibrations of things must yet exert some influence. In any case, the fact that they are still profoundly mysterious is no reason for refusing to study them.

These unknown vibrations certainly exist. They can at rare moments touch the subconscious elements of our mind and thence

[1]In this connection see the admirable note by Sir William Crookes on the probable continuity of vibratory phenomena, and the gaps in our physical organization for the perception of the greater part of these vibrations.

come into consciousness. It is much to be able to make so precise a statement in despite of the scornful denials of official science and the mocking incredulity of the crowd.[1]

7. On the Identification of Spiritist Personalities

When dealing with automatic writing we made allusion to the hypothesis that spiritualists advance almost as an article of faith that a vanished human personality intervenes; that there is an "incarnation" of a dead person whose intelligence animates the body of mediums and writes or speaks through them. This identification of spiritist personalities with the dead is a serious question that demands profound consideration; for the personalities that appear seem real, and a great effort of rationalism is required to withstand the simple and alluring hypothesis that the dead return.

Helen Smith, the celebrated medium, studied by Flournoy, took on the personality of Marie Antoinette, and played that part for many months with a perfection that the cleverest actresses might envy. But it is difficult to see in this anything more than a prolonged and marvellous auto-suggestion. In the absence of very weighty proofs (which Helen Smith did not give), I agree with my learned friend T. Flournoy in refusing to admit that the unfortunate queen animated the humble personality of Helen Smith.

Mrs. Piper presented a first "incarnation"—that of a certain French doctor of Metz, of the very curious name Phinuit—as her guide, who spoke by her voice. But the name has never been discovered in the archives of Metz, and Phinuit could not speak French. When asked how it came about that he had forgot-

[1]Many new facts of cryptesthesia have been reported which establish conclusively the existence of the faculty without throwing much light on its mechanism.

The best experiments are those with Stepan Ossovietzki. They are most exact (*Revue Métapsychique*, 1921, i, 420-431). All precautions were taken; the sealed letter was never lost sight of by the experimenters, and Ossovietzki does not seek to read the contents. He kneads it in his hands, rubs it, and after having stated its contents, hands it back to the experimenters who verify the seal and open it themselves. The envelope was thick enough to preclude vision even by retinal hyperesthesia.

Therefore hypotheses of defective experiment or retinal hyperesthesia must be finally dismissed. No complicity was possible, for none of the experimenters knew the contents of the envelopes. Since there could be neither trickery nor illusion, there is absolute certainty, and the only alternatives are cryptesthesia or chance (second French edition).

ten his French, he answered in all seriousness that he had had so many English patients at Metz that he had forgotten his maternal tongue.

Between the first hypothesis, that Marie Antoinette was incarnate in Helen Smith, Phinuit in Mrs. Piper, Dickens in the medium James; and the second hypothesis, that these three mediums had a subconscious intelligence acute enough to take on the rôles of Marie Antoinette, Phinuit, and Dickens, I do not hesitate a moment in preferring the second. Human intelligence is so wonderfully and mysteriously endowed that it may doubtless be able to enact perfectly the most complex parts. That is assuredly very strange; but this strangeness is not the enormous absurdity that, despite the guillotine and the worms of the tomb, Marie Antoinette and Dickens should return to visit us and that their souls should intervene in our lives.

And, in addition, as many experiments show, the discarnate souls (to use the spiritist phrase), are manifestly very different from that which they were in earth-life. Such extraordinary cases as Marie Antoinette and Dickens are the rarest exceptions. Nearly always the discarnates show very moderate intelligence indeed, and give utterance to commonplaces of a special kind with a "spiritoid" complexion—to use the picturesque barbarism adopted by Flournoy and Lombroso. They hardly remember what they were; they give poor answers to the most elementary questions. In a séance with Eusapia Paladino (who, by the way, never produced any subjective phenomena worthy of interest), a hand touched me, alleged by John King to be that of my father. As a preliminary sign of identity I asked for his first name; but this, so very easy to supply, was not given.

In another experiment with a professional medium, to whom I was absolutely unknown, I obtained by automatic writing a long, verbose, and insignificant message ending in a pun. "Je fais une ——; je dis, nous; j'admire l'art; réunis ces trois mots et tu auras le nom de ta mère." Her name was Renouard; (Raie. nous, art). This cannot be fortuitous, but I absolutely refuse to imagine that the soul of my mother had nothing to say to me but this idiotic play on words.

The idea that Aristotle should return to us to tell us in French, English, or Italian that the future of humanity is bound up with the belief in spirits, will always fill me with strong repugnance to the hypothesis that Aristotle is speaking. These dictated mes-

sages are so remote from Aristotle's writings that they are certainly not from him. The body and the mind make the personality. Not to speak of the body which has been dust these two thousand years, the mind of a human being is known by its imaginations, its hopes, its will, its feelings, its language, and above all its remembrances. If nothing remains of all these, bound together by the consciousness that was himself, I have the right to say that the mind, like the body, has disappeared.

Nevertheless I shall not allow myself to be blinded by rationalism. I admit that there are some very puzzling cases that tend to make one admit the survival of human personality—the cases of Mrs. Piper's George Pelham, of Raymond Lodge, and some others, and in view of the importance of the question, fuller details must be touched upon.

Mrs. Piper's case is the most interesting of all; in the whole record of subjective metapsychics her mediumship is the most remarkable. Her clairvoyance has been studied with more patience and care than has ever previously been given to the matter. Three thick volumes have resulted from that study by the American S. P. R., of which only an abstract is possible in a work like the present which covers the whole ground of metapsychics.[1]

Mrs. Piper had the good luck to be carefully observed for several years; first by Richard Hodgson and then by J. Hyslop of Boston. Hodgson was anything but credulous. He had been to India to study the strange phenomena attributed to Mme. Blavatsky, and had decided that they were frauds. He also, too hastily, inferred fraud in the Cambridge séances with Eusapia. But Mrs. Piper convinced him of the reality of her metapsychic phenomena. The distinguished psychologist, William James, also convinced of Mrs. Piper's genuine powers, introduced her to his notice.

Those powers are not in doubt; we have given in Chapter III, *ante* some precise instances of them; but in the present chapter, which deals with personifications only, and not with the proof of cryptesthesia, we shall speak only of the personification of George Pelham in Mrs. Piper.

Was there really an "incarnation" of George Pelham? That

[1]A partial analysis has been given by Marcel Mangin in the *A. S. P.*, 1898, I. xviii, 228-254, 268-294. The work by Sage may also be referred to. Sir Oliver Lodge has given an excellent analysis which is a model of scientific investigation.

is the question to be answered; not whether cryptesthesia was manifested, of which full proof has already been given.

For a long while Mrs. Piper's guide was Phinuit, that astonishing French doctor from Metz who could speak no French. One day Phinuit announced his approaching departure, and that he would be replaced by another personality. That personality was George Pelham (a pseudonym for Robinson), whose name was barely known to Mrs. Piper. Robinson, on the 7th of March, 1888, had been present at one of Mrs. Piper's séances, but was unconvinced. He died in February, 1892.

Phinuit, in one of his last séances, named George . . . John Hart's uncle, and suddenly said, "There is another George who wishes to speak to you." Forthwith the other George (George Pelham) comes on the scene, gives his name, his Christian name, the names of his intimate friends, and insists that his father and mother should come to converse with him. He asks for the presence of others also; and on following days not only his father and mother but several of his friends obtained numerous and precise details on various conversations that George Pelham had had with them during his lifetime. He said to Mrs. Howard, "Do you still play the violin as badly as ever?" He spoke to Evelyn of a book given to her in which he had written certain words. To Mr. H., a friend of George Pelham's, Mrs. Piper (acting as G. P.), wrote a long letter dealing with very intimate matters, and when Mr. H. had read it, she took it and tore it up.

In thus transmitting the ideas and remembrances of George P., Mrs. Piper both spoke and wrote in his personality. The methods of communication are not now in question; the point is to decide whether it is more rational to infer the survival of George Pelham than to adopt the hypothesis of an extremely developed cryptesthesia. For my own part I consider the latter hypothesis somewhat less improbable than the former; for with Phinuit as her guide, Mrs. Piper had already given decisive proofs of lucidity, though Phinuit had never been a living person.

Since therefore Mrs. Piper had such powers, there is no reason to suppose them absent when George Pelham speaks through her. Why should we believe any other intelligence present than that of Mrs. Piper in a highly lucid state? Why not admit that this lucidity crystallizes, as it were, round the personality of Pelham?

We shall later on examine what objective metapsychics can

teach us on the question of personification and survival; but for the present some conclusions can be drawn from subjective data alone.

However surprising the answers of George Pelham may be, the hypothesis of his survival is very frail; for if apart from any hypothesis of survival, we admit, as we are driven to do, that there are faculties of cognition that outrange our usual senses, then it is possible that Mrs. Piper should acquire knowledge of things known to George Pelham and even to him alone. It is easy to admit cryptesthesia, even very far-reaching cryptesthesia: this faculty of the mind is much simpler than survival, for survival implies a number of unlikely and unheard-of facts that clash with admitted physiological truths and are contrary to the logic that warns us that whatever has a beginning must have an end.

The tendency of the human mind to group its remembrances and its notions (whether metapsychic and transcendental or not), around a real or imaginary person, is not a hypothesis; it is a fact. This makes the simple-minded idea that the consciousness of Marie Antoinette or Charles Dickens has returned quite inadmissible in view of the other hypothesis (of cryptesthesia), for this latter rests on two proved propositions:

A. The human mind has mysterious faculties of cognition.

B. These mysterious cognitions have an invincible tendency to group themselves round a new personality.

It might perhaps be more pleasant (I say perhaps, for it is not certain) to suppose that there is no death, that we are destined to survive, and that those who have passed away are near us, listen to us, and protect us; but it is not for us to seek what we may desire as pleasant or convenient. In matters of science, hypothesis for hypothesis, the more simple, the more likely, and the more rational has most claim on our acceptance. The doctrine of survival seems to me to involve so many impossibilities, while that of an intensive cryptesthesia is (relatively) so easy to admit that I do not hesitate at all.

I go so far as to claim—at the risk of being confounded by some new and unforeseen discovery—that subjective metapsychics will always be radically incapable of proving survival. Even if a new case even more astounding than that of George Pelham were to appear, I should prefer to suppose an extreme perfection of transcendental cognitions giving a great multiplicity of notions grouping themselves round the imaginary centre of a fac-

titious personality, than to suppose that this centre is a real personality—the surviving soul, the will and consciousness of a self that has disappeared, a self which depended on a brain now reduced to dust.

We are, moreover, at the very beginnings of a science that is extremely obscure, so obscure that all affirmations and negations are rash; but the greater the uncertainties the more cautious should be our doctrinal pronouncements, and the bolder our experiments. In experimentation it is impossible to be too bold.

The principal proof of survival, indeed the only proof, is the affirmation of the medium, "I am George Pelham" (after being Phinuit), "and I prove that I am George Pelham because I know all that George Pelham knew." But granting that this is so, the proof is insufficient, for it would be necessary to show that Mrs. Piper's transcendental faculty cannot know what George Pelham knew in his earth-life. This essential proof cannot be given, and that is why I say, provisionally, that subjective metapsychics cannot demonstrate survival.

Spiritualists, when confronted with the poverty of the messages, their use of a language unknown in earth-life, their indifference to, and astonishing ignorance of, matters in which the writers were once passionately interested, say that the defect is in the instrument. "The medium," they say, "is only the instrument that the spirit can but imperfectly control. He finds it difficult to make himself understood and to communicate his thought."

But except in a few rare cases, the inconsistency between the past and the present mentality is so great that in the immense majority of spiritist experiences it is impossible to admit survival, even as a very tentative hypothesis. I could more easily admit a non-human intelligence, distinct from both medium and discarnate, than the mental survival of the latter.

Sir Oliver Lodge has published a remarkable book on survival, which merits special notice both from the interest of the facts themselves and the high scientific authority of the author,[1] who has carefully examined those facts. He will pardon me if, while accepting the authenticity of the facts so well observed and analyzed, I come to a different conclusion upon them.

Those facts are as follows: Raymond Lodge was a second

[1] *Raymond, or Life and Death,* by Sir Oliver Lodge, Methuen, W. London, 1918.

lieutenant in the South Lancashire Regiment, and fell near St. Eloi in Flanders, September 14, 1915. The news of his death reached London September 17, 1915. On the 25th of September, his mother, Lady Lodge, in a séance with Mrs. Leonard, obtained the name of Raymond and the words, "Tell father I have met some friends of his." The question was put, "Can you give any name?" and the answer was, "Yes, Myers" (*Raymond,* p. 98).

On the 27th of September Sir Oliver had a séance with Mrs. Leonard. The guide of Mrs. Leonard is a little girl of the name of Feda. Many séances followed, some with Mrs. Leonard, some with Mr. Vout Peters, some with other mediums, those who took part in them being sometimes Sir Oliver, sometimes Lady Lodge, sometimes Raymond's brothers and sisters.

A characteristic fact announced by the mediums was that there was in existence a photographic group of officers in which Raymond appeared. No one in London suspected the existence of this photograph. Many precise details were given before its arrival in England, more especially the very unusual fact in such groups that one of the officers behind Raymond has his hand on Raymond's shoulder, Raymond being seated on the ground. This episode of the photograph is one of the best instances of cryptesthesia ever recorded. The succession of the facts is as follows:

July 20, 1915, expiry of Raymond's last leave.

August 24, 1915, the photograph taken at the front. Raymond's diary mentions this, but he did not write about it to his parents.

September 14th, Raymond's death.

September 27th, Vout Peters announces that there is a photograph.

October 15, 1915, Captain B. sends the negative to Aldershot to be developed.

November 25, 1915, Mrs. Cheves (a stranger to the Lodge family) writes to say that she has a photograph of the officers of the South Lancashire Regiment and offers to send it.

December 3, 1915, Mrs. Leonard in séance gives a complete description of this photograph.

December 6, 1915, Lady Lodge finds in Raymond's diary a note stating that the photograph was taken August 24th.

December 7th (morning) Sir Oliver writes to Mr. Hill his idea of what the photograph should show. This letter was prior to the arrival of the group.

December 7th, the photograph reaches Mariemont (Sir Oliver's residence). In other séances, Raymond, speaking through Mrs. Leonard and conversing with Feda, gives a number of small but very significant facts that Mrs. Leonard could not know: the name of one of his comrades, Mitchell, an officer of the Flying Corps; the names of Raymond's two sisters; the song *My Orange Girl* that Raymond liked to sing; and a vague indication on the death of an old servant of the family. The episode of "Mr. Jackson" is curious. Feda says that Raymond speaks often of Mr. Jackson, and mixes up his name with a bird and a pedestal; and Raymond seems much amused and makes jokes on Jackson, the bird, and the pedestal.

Now "Mr. Jackson" was the name that Raymond and the other children gave to a peacock. It had died some time previously, had been stuffed, and put on a pedestal.

In some cross-correspondences simultaneous at Edgbaston and London, the word "Honolulu" was specifically mentioned at both places. To estimate the value of the whole mass of proofs it is obviously necessary to refer to the book itself, of which only these very scant indications can be given here. From the whole of the evidence Sir Oliver Lodge concludes that Raymond survives. This inference has been fully discussed and rejected on consideration of equally valid facts in the case of George Pelham.

Many examples have now been adduced that establish incontestably that lucidity, cryptesthesia, and telepathy exist; that is, that by some channel which we do not understand, real facts are made known; but that does not prove that the big consciousness of Raymond has survived.

If we accept the two facts—that some mediums are aware of things that normal channels cannot convey—and that they tend to group both normal and supernormal knowledge round real or imaginary personalities, that amply suffices to explain everything.

Mrs. Leonard and Mr. Vout Peters have perceived certain details relating to Raymond; forthwith their subconsciousness has invented the personality of Raymond—imaginary in the sense that Raymond no longer exists, real in the sense that round this auto-suggestion they have grouped many actual facts that their normal senses could not have supplied.

For, finally, if Raymond were really speaking by the intermediary of Feda, why should he be so reticent of proofs? Why, in such messages, are there so many obscure and symbolical allu-

sions (like those relating to Faunus and Myers) and why so many words? Why so few names, dates, and precise remembrances? Cryptesthesia is always partial, defective, symbolical, and so mixed with errors and puerilities that it is difficult to believe that the consciousness of a deceased person can be limited to such a degree, when more cogent witness would be required to enable us to affirm scientifically a belief in immortality.

Mrs. Leonard says that Raymond has the hand of a comrade on his shoulder. No one in London knows this—it is incontestable lucidity, but I cannot conclude that Raymond himself gives this detail. It is simpler to refer it to lucidity only, the rather as she has given proofs of lucidity in cases where the intervention of a deceased person cannot be invoked. Very probably if the gallant Raymond had not been killed, Mrs. Leonard could have equally well received knowledge of the photograph, for she has on several occasions shown that she knows things by supernormal means.

Alas, no! survival is not to be proved thus; and despite the genius of its author, and his noble faith in the future life, this able book has not supplied the decisive data. If it were incumbent on me to formulate a conclusion, the very fragmentary, symbolical, and uncertain nature of these messages that claim to be from surviving minds, and their astonishing lack of precise detail, would lead me to infer that there is no survival of consciousness. This inference is made with deep regret, for it costs me much to separate myself from Myers and Lodge who have my entire confidence and admiration.

Moreover, in the very midst of my negation, I feel it incumbent to make full reservations; we are only at the dawn of metapsychic science and all absolute negation should be ruled out.

In fine, there are three possible hypotheses: (a) Everything comes from the mind of the medium; (b) the mind of a deceased person intervenes; (c) a non-human intelligence is concerned, an angel, a demon, or some other power.

On subjective data alone, the first hypothesis is certainly the most likely, since the admission that the human mind has mysterious powers of cognition covers the ground; the second seems hardly admissible because it is in complete disaccord with all physiology and implies innumerable psychological improbabilities; and the third is absolutely useless *from the point of view of subjective metapsychics taken alone,* and there is no real reason for putting it forward.

Later on we shall see whether the study of objective metapsychics leads to a modification of this preliminary opinion.

A large number of so-called spirit identifications have been published in spiritualist journals, notably in the *Banner of Light.* Mr. J. Burns, editor of *The Medium and Daybreak,* has collected many from J. Morse's mediumship.

Unfortunately these cannot be used to any effect, either for identification or to prove cryptesthesia, for the good faith of the medium, which I should be disposed to accept, proves absolutely nothing.

Pantomnesia[1] accounts for Mr. Morse being able to write, "I am Thomas Waller, I lived at Chirfton Road, Manchester. I died in May of this year aged over sixty." For this to be evidential, rigorous proof is needed that neither consciously nor subconsciously could the medium possibly have known the facts alleged. Even if this difficult and almost impossible proof could be given, the inference might be that cryptesthesia and not the surviving consciousness of Thomas Waller was the origin of the message.

The case of Abraham Florentine has been cited as a proof of survival (Barrett, *loc. cit.,* p. 208). It proves cryptesthesia but not survival. In August, 1874, Stainton Moses received a message from one Abraham Florentine, an old soldier of 1812, who had died at Brooklyn, aged 83 years, 1 month, and 17 days. After much research it was discovered that an old soldier of 1812 had actually died at Brooklyn at that precise age. No American or English newspaper had mentioned the fact, so that it could only have reached Stainton Moses by supernormal means.

It seems to me rash and unscientific to assume that survival is the one and only explanation of facts that had reached Stainton Moses by cryptesthesia. Several other hypotheses are possible, improbable indeed, but less wildly improbable than the return of Abraham Florentine to animate the hand of Stainton Moses.

If we allow to cryptesthesia its full force, it will be seen to extend to all facts, however distant, and however trivial they may seem. The facts are there to establish that cryptesthesia exists, even when no death is in question. It is therefore unnecessary to suppose survival of the dead since other instances are known in which such facts are revealed by this faculty without any corresponding death. As in the cases of George Pelham and

[1]Regression of memory: the imagination that a thing experienced has been "seen before."—Translator's note.

Raymond Lodge, the case of Abraham Florentine gives no ground for the inference of survival. It is excellent clairvoyance, but there is no need to go further.

Another inconclusive case is reported by Bozzano. In a spiritist circle at Nancy, the spirit of Cauchy, who died in 1855, dictates the Latin phrase which appears, so it seems, on his tomb in the cemetery at Scéaux: *Beatus qui intelligit super egenum et pauperem.* It is proved that the inscription is really there, and that it was covered with lichens that had to be removed before the letters could be read. But what a number of things need to be proved: (1) That no word or writing could have acquainted the medium with the fact, consciously or otherwise; (2) that the inscription was absolutely illegible one, two, or ten years previously; (3) that no book or biography of Cauchy mentioned the epitaph.

I do not fear once more to emphasize that cryptesthesia should not be admitted for any fact until every other possible normal explanation has been exhausted.

A certain number of cases have been collected by Bozzano (*A. S. P.*, 1910, xx, 267-268).

It is probable that most of these give some evidence of cryptesthetic power, but they are often only pantomnesic illusions. In any case they prove nothing as to survival of human consciousness; and notwithstanding their interest it is unnecessary to mention them here. Perhaps the day will come when they will find that explanation, but provisionally we shall not adopt the hypothesis of survival, as yet quite undemonstrated and perhaps undemonstrable. I will, however, cite the following very moving incident which has only recently been published, though it occurred in 1904.

The guide of the medium was his father, Luigi. On that day Luigi seemed terrified and declared that bad spirits were near the medium. Suddenly L. D., the medium, glaring round, rushed upon a certain X., who was present. He foamed with rage, and tried to throttle X., crying out, "I have found you at last, wretch! I was a soldier of the royal marines. Do you remember Oporto . . . you murdered me, and I will avenge myself and strangle you." His violence was such that the unfortunate X. was nearly suffocated, and was hardly liberated by the united efforts of four of the onlookers.

X. had been an officer in the navy and had long since retired.

He left the navy under tragic circumstances. (It would be interesting to know whether, as seems probable, the facts were known to those present; as to which Bozzano does not enlighten us.) Some years previously X. was with his ship at Oporto. Passing along a side street he heard some rowdy Italians singing in a pothouse. He entered and found some half-drunken sailors, one of whom abused him. He drew his sword and killed the aggressor. For this he was condemned to six years' detention in a fortress and invited to send in his resignation. Did the medium know this terrible story? Even if he did not, cryptesthesia might have revealed it, and then the reconstruction of the scene is explicable by that alone, more easily than by the return of the soldier murdered at Oporto.

Myers took the greatest possible interest in the problem of survival; he believed and hoped it to be true. He proposed to certain of his friends of the S. P. R. to write certain facts known to them only, in a sealed letter, to be opened when a medium supposed to be in communication with his spirit should have claimed to have read the contents of the sealed letter. The result of this experiment was negative, as Sir Oliver Lodge has testified. The alleged promise of R. Hodgson to return also came to nothing (*A. S. P.*, 1906, 124 and 392).

Montaigne, in his *Essays* (II, vi, edit. Amsterdam, 1659, 571), recalls the promise of Canius Julius, going to execution: "I holde myselfe readdie to percyve if in this briefe moment of dethe I may knowe somewhat of ye departure of ye Soule and if shee shd feele wrathe at her separation, for that if I learne aught thereon I may warne my frends if it be so permytted." But Canius Julius did not return. (I transcribe the old French into old English.—TRANSLATOR.)

Is it necessary to speak of Gaston Crémieux, shot at Marseilles in 1871? In prison before his execution he declared himself a believer in the immortality of the soul and promised his friends, of whom Clovis Hugues was one, to return. At the moment when he was shot, Clovis Hugues, who knew nothing of the death of his friend, heard in his cell distinct raps that seemed directed intelligently.

Mr. Happerfield had promised his old friend, John Harford, when the latter was on his death-bed, to look after his widow; and he took measures to place her beyond want, confiding her interests to one of his nephews. Long after, one morning towards

dawn Mr. Happerfield saw the apparition of his friend, who said, "You have not kept your promise, my wife is unhappy." Mr. Happerfield, though not alarmed, woke his wife and instituted enquiries. Mrs. Harford was living in great indigence.

It seems unnecessary to see in this incident anything but the vague remorse of Mr. Happerfield taking a symbolical form.

Many times two friends or married couples have promised that the first to die would manifest to the survivor; but the rare cases in which the promise has been kept belong to the well-attested instances of cryptesthetic monitions.

Finally, I will make a remark, perhaps hitherto not put forward, against the identification of metapsychic forces with the defunct: Those who return are mostly well-known and distinguished persons. Why do not mediums present everyday and obscure persons? If consciousness persists it must persist equally for the many as for the few; and the obscure are a hundred thousand times more numerous than the distinguished; but the incarnations are of fanciful personalities like Rector, Imperator, John King, Phinuit, Katie King, or of notabilities.

In conclusion, it would be rash to deny survival, but a thousand times more rash to affirm it. This negation of survival in no way implies the negation of cryptesthesia; the two propositions must be entirely dissociated. The extraordinary, supernormal faculty of cognition is a fact; the survival of human consciousness is a hypothesis.[1]

8. *Xenoglossis*

The speaking of strange tongues must be included among the phenomena of cryptesthesia. It is the understanding, reading, writing, and pronunciation of a language that has not been learned. I call it "xenoglossis." There are cases of this, which, though not admitting of a definite inference, are disturbing. Such cases are cited by C. de Vesme (*A. S. P.*, 1885, xv, 319).

In the first place we cannot apply this name to the imaginary languages created by mediums.

[1]Even Aksakoff, in despite of his robust faith in a future life, says: "Absolute proof of spirit-identity is impossible to obtain; we must be contented with relative proof." In plain French, a relative proof means a hypothesis.

The most celebrated case of the kind is the Martian language of Helen Smith, so carefully analyzed by Flournoy. He demonstrated rigorously that this new language was modified French. This new tongue shows an astounding memory and stupefying powers of invention. Helen Smith in six months was able to speak fluently in a tongue of her own invention. Flournoy having advanced some objection she changed her Martian language and made it ultra-Martian. Wonderful!

Inspired by Helen Smith's Martian novel, Mrs. Smead in America invented yet another Martian tongue (Hyslop, *A. S. P.*, 1906, 461). These creations illustrate the fertility of the subconscious. They have nothing to do with cryptesthesia. True xenoglossis consists in speaking in an existing language which is unknown to the medium.

The most striking instance is that of Laura Edmunds, the daughter of Judge Edmunds, president of the Senate and judge of the Supreme Court of New York, a man of high intelligence and unimpeachable rectitude. Laura, a fervent Catholic and very pious, spoke only English. She had learned at school some words of French, but that was all she knew of foreign tongues. One day, in 1859, Mr. Edmunds received a visit from Mr. Evangelides, who conversed in modern Greek with Laura Edmunds.

In the course of this conversation, at which several persons were present, Mr. Evangelides was moved to tears, for Laura informed him of the death of his son in Greece. She incarnated, it would seem, an intimate friend of his, Mr. Botzaris, who had died in Greece. If Edmunds is to be believed, Laura spoke in modern Greek and knew of the death of Evangelides's son by the intermediary of Botzaris. The announcement of death was correct.

Judge Edmunds adds, "To deny the fact is impossible, it was too well known; I could as well deny the light of the sun. Nor could I think it an illusion, for it is in no way different from any other reality. It took place before eight or ten educated and intelligent persons. We had never seen Mr. Evangelides; he was introduced by a friend that same evening. How could Laura tell him of the death of his son? How could she understand and speak Greek, which she had never previously heard?" [1]

[1]De Vesme, Xénoglossie, *L'écriture automatique en langues étrangères, A. S. P.*, 1905, xv, 317-353. *La xénoglossie de Miss Laura Edmunds, A. S. P.*, 1907, xvii, 603.

Judge Edmunds also records the xenoglossis of Mrs. Young of Chicago who, under control of German spirits, spoke and sang in German to a circle in which no one knew that language. Says Mr. Young, "I begged Mr. Euler, a German medium, to come. He came twice, and conversed with the medium for over an hour at each visit. On other occasions Mrs. Young spoke in Spanish and Italian. She was a working woman who had only been to a primary school."

I have myself observed a curious case, difficult to interpret, nearly related to xenoglossis. Briefly it is as follows:

Mrs. X., a young woman of about thirty, had never learned Greek, and it is absolutely certain that she did not know it. Nevertheless in my presence she wrote long sentences in Greek, with some errors that clearly show mental vision of one or more Greek books. After much research, aided by chance more than by my own penetration, and thanks to my friends, M. Courtier and Dr. Vlavianos, of Athens, I was able to discover the book from which Mrs. X. had drawn most of the long Greek sentences that she had written in my presence. The book is not to be found in Paris except in the National Library—the Greco-French and Franco-Greek dictionary by Byzantios and Coromelas. As it is a dictionary of modern Greek, it is not in use in any school.

Mrs. X. wrote before me some twenty lines of Greek with about eight per cent. of small errors such as would be made in transcribing Greek without understanding it. Thus instead of *στολησμούς*, Mrs. X. writes *στολισμοδς*; instead of *ὁμιλους*, *δμιλους*; instead of *ἐυπαροδῳ*, *ευπαρ δφ*; instead of *μικρόν*, *μικρόυ*; all of them mistakes that indicate a visual copy by some one who does not know Greek and makes the errors consequent on imperfect visualization. I am absolutely certain that in writing those lines Mrs. X. had no text before her eyes; she was looking into space as if she were copying from the text of a language unknown to her of which she saw the characters without knowing their meaning. Although she certainly did not understand the phrases it is remarkable that they fitted the circumstances well enough. One evening at sunset, she wrote a Greek phrase from the dictionary above-mentioned: *Ανατελλοντος και δυοντος του ηλιου η οκια εκτειναται μακραν.* When the sun is at its rising or setting shadows are thrown far. There is a slight error; *εκτειναται* for *ἐκτείνεται.*

There are but two solutions—either fraud, aided by an unheard-of visual memory, or the hypothesis of extraordinary cryptesthesia. Possible fraud must always be reckoned with. Let us suppose this in despite of the psychological improbabilities; let us admit (1) that Mrs. X. bought secretly Byzantios's dictionary, the *Apology of Socrates,* Plato's *Phædra,* and the Gospel of St. John, the four books from which the extracts came; (2) that she meditated over these to fix in her mind the visual image of letters whose sense she did not understand.

Both hypotheses are admissible if we suppose long and elaborate preparation, which is, after all, possible. But it is singular that Mrs. X., who knows no Greek at all and could not understand the sentences, should have retained so clear a visual image as to be able to reproduce from memory six hundred and twenty-two letters with six per cent. of errors. It is not exactly a case of xenoglossis, for she neither spoke nor understood Greek. She wrote long sentences from mental vision; how did she get this vision? This is very different from speaking in a strange tongue, and to explain this strange case we must admit either cryptesthesia or a prodigious visual memory that can nowhere be paralleled.

Here and there other instances of xenoglossis are to be found:

The young daughter of Mr. and Mrs. Brown of Melbourne, aged eleven, wrote automatically some Chinese characters, holding her pen in the Chinese manner. It appears that this message is badly written but is partly legible. Now Chinese writing is extremely difficult as everyone knows. But even if the fact were correctly observed, what is to be inferred from it?[1]

A very striking case is adduced by M. Chedo Miyatovitch, a Serbian diplomat. He went with a Croatian friend, a M. Hinkovitch, a lawyer of Agram, to consult Mrs. Wriedt, an American medium (professional), in London. An old Croat doctor controlled her, spoke in Croat to M. Hinkovitch, and conversed for some time in that language. Another time Mrs. Wriedt spoke in Serbian in the name of M. Miyatovitch's mother. On another

[1]A discussion on this was held by the *S. P. R.* (*J. S. P. R.*, June, 1906, 276). Sir William Crookes who presided thought that the writing was done "in a visionary manner, copied from their visionary prototypes." There are some interesting remarks by Mrs. Verrall, Sir Oliver Lodge, Mr. Piddington, and Mr. F. C. Constable on the subject, and the very fair criticisms of M. Dessoir, *Vom Jenseits der Seele,* 4th edit., Enfle, 1920, 97-100, should also be read.

occasion, Mme. Selenka, a German, being present, her deceased husband, through Mrs. Wriedt, sang a German song.

Some aspersions have been cast on the authenticity of Mrs. Wriedt's mediumship to which Sir William Barrett has replied emphatically. In any case it is difficult to suppose that she can normally speak fluent Serbian and Croat.

Eglinton, who knew no German, has given messages in German by direct writing. In a séance in which Mr. Gladstone, the illustrious statesman, took part, there were answers by direct writing in Spanish, in French, and in Greek. Eglinton knew not one word of Spanish or Greek, and very little French; but Eglinton's sincerity is doubtful (Erny, *loc. cit.*, 57). Mrs. Thompson was able, in hypno-spiritist trance, to speak in Dutch to Dr. van Eeden, though absolutely ignorant of that language. Mr. Damiani, in a report to the Dialectical Society of London, states that he received in Sicily many communications in German, French, Latin, and English through an uneducated medium of the working class.

Mr. Burns, in a report to the same society, states that he has seen his sister-in-law, Mary Burns, write messages in languages that she had no knowledge of.

In the *Revue Spirite* (January 15, 1886), M. Didelot, a schoolmaster, gives an account of an experiment by the canon of the cathedral at Nancy, assisted by some venerable priests of the diocese, on a young boy who was the medium observed by M. Didelot. An answer was given in Latin to questions put by the priests enclosed in a sealed envelope placed on the table.

Some facts of very transitory xenoglossis have been observed by Dr. Cadello of Palermo.[1]

Minfa Filituto, a young girl of Palermo, aged sixteen, fell into spontaneous somnambulism in 1849. In one of these attacks she claimed to be a Greek, and wrote Italian sentences with Greek letters. She did not know Greek, but a Greek grammar had been lent to her. On the next day she spoke fluent French, a language of which she knew scarcely anything. On the third day, though she had never learned a word of English and no one had ever spoken English in her presence (?) Dr. Cadello testifies that she conducted a long conversation with two English gentlemen in their own tongue. On these three days she seemed to have completely forgotten her mother tongue. On the fourth day

[1] *Storia di un caso d'isterimo con segnazione spontina,* Palermo, 1853, Analysis by Hahn, in *A. S. P.*, 1901, 149-159.

she spoke Italian, which, being a Sicilian, she knows but imperfectly and never speaks. On the fifth day, the attack having come to an end, she resumed her Sicilian speech and completely forgot the episodes of her xenoglossis.

What are we to think of the story related by Dr. Grand Boulogne? A lady who knew no Latin wrote automatically *with unexampled speed,* "Sacerdos a deo dilecte, cur manifesta negas? Cur concedens omnia potenti Deo non fateris veritatem, oculorum aciem perstringentem. Sacrae litterae memento, crebrae sunt manifestationes angelis. Vide et crede." The style is surprisingly bad ecclesiastical Latin, which is all the more curious. But to carry conviction, more must be known of the conditions of the case, and above all the incident should have been repeated. Dr. Grand Boulogne remarks that during this writing, blows were struck on the table and the ceiling (cited by Delanne, *Recherches sur la mediumnité,* p. 420).

Dr. Böhm[1] observed a person who wrote with chalk on a blackboard answers to questions put to her. She wrote in Greek, Latin, and Hebrew, being ignorant of all three; but the account of the experiments is too imperfect to allow of any inferences.

Aksakoff (*Animisme et Spiritisme,* p. 618, French version) quotes the case of the Rev. Shirman, who had lived in certain islands in the Pacific and in some séances with Mrs. Allams, a professional medium of Providence (Rhode Island), saw the form of a native woman of the Marquesas Islands who spoke in her mother tongue. But this case was very probably fraudulent, for the phenomenon only occurred after Mrs. Allams had known Mr. Shirman for six months.

Mme. d'Espérance knew no Greek, but when she gave a materialization, there appeared the form of a woman of rare beauty who called herself Nepenthes. Nepenthes wrote in classic Greek in Professor L.'s notebook: "I am Nepenthes, thy friend. When thy soul is oppressed by overmuch pain, call on me, Nepenthes, and I will speedily come to assuage thy trouble." [2]

Certain cases of pseudo-xenoglossis must be severely criticized. Gibier (Delanne, *Apparitions materialisées,* ii, 505) cites the case of Mme. Salmon who spoke no French, but said without

[1] *Über wissenchaftlich durchführte Versuche und Gedankenlesen* (*Psych. Studien,* 1917, xliv, 575).

[2] Cited by Bozzano, *A. S. P.,* 1910, 9. The case of Nepenthes is interesting, but experiences with Mme. d'Espérance must be taken with great reserve.

any foreign accent, "Ma tante, ma tante, je suis si heureuse de vous voir." It would be easy to learn these words and to repeat them with a pure pronunciation. Mrs. Salmon is a professional medium of questionable honesty.

I note *passim* the stories of the exorcists of the sixteenth and seventeenth centuries with cases of "possession" at Loudun and elsewhere. The "devils" who deceived these poor hysterics answered the exorcists in fluent Latin; but how much are we to put down to error and illusion? Cases in which children who did not know their letters have written messages, must be classed under xenoglossis. They are rare, but Bozzano reports several and quotes others from Aksakoff (*A. S. P.*, 1910, xx, 10).

Myers and Hodgson saw the words "Your Aunt Emma" which had been written by a little girl of four who did not know a single letter of the alphabet. Drs. Dusart and Ch. Broquet gave pencil and paper to a child of three and a half, Celina, who though quite ignorant of letters, wrote, "I am glad to manifest through a charming little medium of three-and-a-half who promises well. Promise me not to neglect her." But one can deduce nothing from these isolated facts. Dr. Quintard stated to the Medical Society of Angers in 1894 the curious case of a child of seven, who not only made intricate arithmetical calculations, but also guessed his mother's thoughts. Perhaps sufficient care was not taken to avoid all collusion, conscious or unconscious, between mother and child. The precocity of the child is remarkable, but other similar cases are known (Delanne, *Recherches qu. supra,* Paris, 1902, 206).

I cannot consider as metapsychic the cases of musical precocity reported by Mr. Gower and attributed by him to some mysterious power, for the child in question was eleven years old (Eric Rorngold). Mr. Gower cites also the case of Blanche Cobacker, aged twelve, who plays and composes marvellously. At eleven and twelve everything is explicable by abnormally rapid development.[1]

Dr. Urysz reports the case of a peasant girl of fourteen who could hardly read, who wrote for him as if she were one of the patients he had attended at Lemberg six years before, "Thank

[1] *J. S. P. R.*, 1913, 56. Pepito Arriola was a skilful musician at the age of three years and three months, but neither I nor anyone else imagined the intervention of a spirit to explain this marvellous precocity. I note here, without drawing any inference, that Mr. Gower saw Pepito in 1911, the same Pepito who in 1900 was already a real artist, and that Mr. Gower found to Pepito's great surprise that the boy had the gift of automatic writing.

you for the injection made on my death-bed, November 18, 1900. Caroline C."

It is possible, though unlikely, that the child, then eight years old, may have known Caroline C. (?). Caroline lived at Lemberg, and the child at Bralyhanen. The child's writing in her normal state was rude and infantile, but the message was absolutely in the handwriting of Caroline C.; it was, moreover, by direct writing (?). This singular story is questionable at all points.

To sum up: None of these facts, whether of xenoglossis or of automatic writing by children and unlettered persons, carries sufficient weight of proof. We cannot, therefore, grant them full rights of citizenship in the extensive kingdom of subjective metapsychics. I am inclined to think that some day, perhaps soon, some may be admitted as authentic. Meanwhile, however, better instances must be sought and they must be presented in a less fragmentary and imperfect manner than those known hitherto. For the present we must limit ourselves to the facts which are proved and established by thousands of cases, considering the rare and curious phenomena of xenoglossis as milestones on the road of progress to that fuller metapsychic science which cannot as yet be written.

CHAPTER IV

The Divining-Rod

The curious facts relating to the divining-rod seem at the first glance to have no connection with metapsychics; but it will soon be apparent that these phenomena, long known and now well proven, suggest some interesting hypotheses on cryptesthesia, warrant certain analogies, and throw some light on the unknown forces that actuate the subconsciousness.

1. *Historical*

The use of the divining-rod[1] is of high antiquity.

When certain sensitives hold in their fingers a flexible hazel rod without moving it intentionally, it seems that under certain conditions the rod bends, of itself as it were. It turns very strongly in the hands of the holder, and, as it would seem, independently of the will of the operator.

When such persons walk over ground that covers unknown water-springs the rod turns abruptly and with great force. This fact has long been used to discover sources of water, and the diviners have hence been called *sourciers* in French. M. Mager proposed the name *baguettisants* (1908). In English they are called "dowsers."

In 1854, after M. Riondel's monograph on the discovery of springs, the Paris Academy of Sciences appointed a commission to examine the subject. The celebrated chemist Chevreul

[1]Important monographs have been published on the subject; there is even one devoted to its bibliography alone. There is much useful matter in Henri Mager's *Les Baguettes des Sourciers et les forces de la Nature*, Paris, Dunod, 1920. Special mention should be made of the first work of a scientific nature on the subject, *La Physique occulte ou traité de la baguette divinatoire* by the Abbé de Vallemont, Paris, 1693. See also the work of Chevreul, 1854, and J. Maxwell on the same (*A. S. P.*, 1904, xiv, 276-290, and 337-358); and especially the excellent work of Sir William Barrett, *On the so-called divining-rod, P. S. P. R.*, xiii and xiv. The bibliography of C. v. Kling Kowstroem, *Bibliographie der Wünschelruthe* (Shönhuth, Munich, 1911).

was entrusted with the report of the commission. This report was not presented to the Academy, but was published as an independent book. It only averred that the movement of the rod is not produced by physical forces but by the hands and muscles of the dowser.

M. Chevreul, in fact, returned to the ideas that he had enunciated in 1833 on subconscious movements as causing the movements of the "magic pendulum."

This is an instrument long used for divination, consisting of a weight hung from a thread. The upper end of the thread is held in the hand, and the movements of the weight (often a ring) give the indications. Sometimes it is suspended at the centre of a circle on which are inscribed the letters of the alphabet; the ring then moves to the letters, thus spelling out a word or a phrase. There is no need to insist on the fact that the answers are due to the subconscious movements of the person holding the thread. These are involuntary, but are, nevertheless, actuated by intelligence. The phenomenon is essentially the same as automatic writing, conversations by planchette, the "willing game," and other analogous facts well known today; that is, involuntary and unconscious muscular movements organizing themselves by some kind of synthesis. This subconscious synthesis is sometimes so coherent as to lead to the hypothesis of the intervention of a new personality.

It is easy to make the following very instructive experiment with a young, simple-minded boy: The pendulum is put into his hand and he is told that it will indicate his age. Supposing this to be twelve years, the pendulum will strike twelve times on a screen placed near it; and the boy will be amazed, and will say, "I stayed quite still." Now, he did not stay quite still, and it was really himself that struck the twelve strokes, but he did not will to do this and was not aware of his own movements. He could equally well have dictated a sentence by movements of the ring to an alphabet; his subconsciousness after having *thought* of the phrase would have translated it by almost imperceptible muscular movements towards the letters.

These facts are now undisputed. To Chevreul belongs the merit of being the first to indicate their principle.[1] According to him, and to Babinet, and to Barrett, and to most of the authors

[1]H. Mager, *loc. cit.*, Paul Lemoine, *Quelques observations sur la baguette divinatoire* (*Bull. de la Soc. Philomathique de Paris*), 1913, v, 10, 17.

who have studied the question, the movements of the divining-rod are determined solely by involuntary muscular contractions of the dowser.

Thus regarded the question seems very simple, but this simplicity is only in seeming.

2. *Summary of the Facts*

The bending of the rod over water-springs or metals is incontestably true. It has recently been fully verified, with all possible care, and the phenomenon can no more be denied than any fact of chemistry or physiology. I will quote only the more recent experiments, those of M. Paul Lemoine made at Toulouse in the chemical laboratory of the Catholic Institute. The Abbé Caubin, a very experienced dowser, was able to reveal the presence of divers metallic masses. The kind of rod used has some influence on the result. With a wooden rod there were eight successes out of eight trials; with a copper rod four successes in seven trials; iron gave two in four; and glass none in five trials.

The following experiments are very interesting: different weights of gold induced movements of the rod at distances greater or less according to the greater or less weight of the metal. The Abbé Caubin knew the amount of metal placed for trial, but M. Lemoine convinced himself that voluntary movements by the operator did not enter into the matter. Further trials resulted in the figures below:

Mass of gold (grams?).	*Distance at which the rod began to turn (metres).*
3	1.70
16	2.20
32	2.70
48	3.30
64	4.00
90	4.60

There was a series of trials, published in 1913 by H. Mager, at the Forest of Vincennes at which it was clearly proved that masses of metals buried in the ground could be discovered equally well as moving water. The discovery of moving underground water has almost become a trade and cannot be doubted: the government engineers in different lands use the faculty of dowsers to discover water; this is done in various districts of

France, in Tunisia, Algiers, the United States, and in German Africa. Differences of skill in dowsers are not due to the rod not turning in their hands, but to unequal ability in interpreting its movements as to the extent, depth, and direction of the flow.

Although the history of the divining-rod is only indirectly connected with metapsychics, the fact itself is of such import that the recent works proving it must be mentioned here.[1]

To A. Martel, who was quite sceptical, Viré indicated *exactly* (underlined by Martel) on the surface of the ground, for more than a thousand yards, the course of a subterranean stream. It matters little that he knew the country, for the surface gives no indication of an underground flow. Martel also gives the successes obtained in German Africa.

Summing up his results, M. Viré has sent me an unpublished note in which he gives the figures below from fully verified trials since 1913 by Messrs. Pélaprat, Probst, Jouffreau, A. Viré, Colonel Vallantin, and the Abbé Mermet:

	Number of Experiments.	*Percentage of Successes.*
Subterranean water.....	19	89
Subterranean cavities.....	23	87
Metals and metallic veins.....	11	80
Coal	9	55

Calculation by percentages underrates the successes, for a remarkable positive result greatly outweighs many failures. The probability is not 1 to 2, but very much less.

For instance, M. Pélaprat and M. Viré (in an unpublished experiment) showed Mr. A. C., councillor of state, where to sink a well on his property at Juillac (Depart. Lot). Several borings had been made without results. Messrs. Pélaprat and Viré indicated a thin stream of water thirteen metres below the

[1]I give prominence to the work of M. Armand Viré, D. es-Sc., president of Archæological Society, who is a skilful dowser, *Bulletin d'histoire naturelle,* and *Comptes rendus de l'Academie des Sciences,* December 22, 1913, clvii, 1460. See also E. A. Martel, *Traité des Eaux souterraines,* Paris, Doin, 1921, 740-752, and P. Landesque, *Hydrologie* et *Hydroscopie,* Paris, Dunod, 1920.

1. See *Verband zur Klärung der Wünschelruthfrage,* Stuttgart, 1912.

2. Besides the monograph by Barrett, see *Sanitary Record,* May 2, 1913.

3. The analysis of the work of the Congress of Halle has been given by E. Noel in the journal *l'Eau* (November 15, 1913). V. *Das Wasser* (Leipzig, 1913). M. Argner is the editor of a review devoted solely to this subject, *Die Wünschelruthe,* Leipzig (1909-1921).

surface: a well was sunk, and the water was found in sufficient quantity for the purposes required.

English results agree with those of French and German dowsers.

M. Landesque, of the French Government Engineering School (*Ponts et Chaussées*) gives an account of his experiences in Tunisia, in a very interesting book from which I will cite only the following characteristic incident: The military post at Ramsa had a well outside the camp. M. Landesque indicated a spring within the camp at a depth of six metres. The boring was made but no water found. M. Landesque advised to go a little deeper and one metre farther down the spring was discovered.

These facts are very important, and M. Martel on an impartial summary of all opinions concludes in favour of a rhabdic force, and adds that additional experiments are desirable; in which I concur, not to establish the undeniable facts, but to throw light on the conditions under which they occur. The interesting fact, verified by many experiments, is that the rod turns in the hands of the dowser when over subterranean water; and this fact is pregnant with many important theoretical inferences.

In one experiment (Mager, *loc. cit.*, 24), two dowsers, Falcoz and Probst, recognized metal plates wrapped in paper. Five different metals were used. Both dowsers agreed in naming the metals correctly. Therefore on ten experiments each having a probability of 1 : 5 there were ten successes, which gives the certitude of $(\frac{1}{5})^{10}$. But since the fact is established there is no more need to calculate chances than to do so to establish the deflection of the magnetic needle by an electric current.

That some persons still hesitate over the matter is due to a wish to use the divining-rod as a measuring instrument. It is desired to use it for industrial purposes, and then the depth and direction of flow are important matters. This knowledge varies with the skill of the dowser; but we are not here concerned with the exactitude of the revelations by the rod, but only whether there is an emanation, or as I propose to call it, "a rhabdic force" acting on the nervo-muscular system of the man and through him on the rod.

It seems to me that this cannot be in doubt (Marage, *Revue Scientifique,* February 14, 1920); but is the problem one of physics or of metapsychics?

By our definition of metapsychics the movement of the rod would seem to be excluded from that science, since there cannot be any question here of *intelligent* forces setting human

sensitiveness into action. Nevertheless, the history of the divining-rod is pertinent to our subject. For, if natural forces (underground water and metals) exercise an unknown action upon the subconscious mind, there must be unknown vibrations that awaken cryptesthetic sensibility; and we are brought back to the metapsychic that deals with the unknown vibrations of things.

Is the bending of the rod due to unconscious muscular action of the dowser, or is it a direct action of some physical force upon the rod?

The hypotheses of trickery, chance, and conscious muscular action can be at once dismissed. Dowsers discover water-springs neither by chance nor by fraud; the rod turns strongly in their hands in spite of themselves, so to say, giving indications by the direction and strength of the movement as to the direction and depth of the subterranean stream; though the indications are very difficult to interpret correctly. There are therefore but two hypotheses:

A. The movement of the rod is due to unconscious muscular contractions.

B. They are independent of these muscular contractions.

The first of these is very simple, and doubtless the only one to be generally accepted, as it is by Chevreul and Barrett. The unknown physical force (rhabdic force) influences the subconsciousness of the dowser and induces muscular contractions.

But certain difficulties are involved.

The movements of the hazel rod are sometimes strong enough to break it, the parts of the rod held in the hands of the dowser not moving at all when the middle part bends. P. Lemoine placed each end in a sheath held in the hands. *The rod turns in the sheath,* as shown in Paul Lemoine's woodcut.

Despite the exactitude of this observation we cannot admit that there is no muscular action. How can we suppose that the rod is influenced physically and directly by water, metals, or metallic salts? Is it possible that it should move by itself whilst the muscles of the hands are inert? If this were so the dowser would not be required, a mere physical instrument to show the angular displacement would suffice. But under such conditions the rods do not move at all. The presence of the dowser is required and his personality is the necessary and preponderant condition.

H. Mager is inclined to think that using proper means everyone might be a dowser; but he gives no proof of this. The positive

and undeniable fact is that in the hands of some persons the rod turns very forcibly, while with others it does not turn at all. Mager constructed a galvanometric instrument for the same purpose which has not as yet succeeded, but would seem to be actuated by the potential of electric forces that accompany moving subterranean water, without the presence of a dowser. But these small variations of the magnetic needle are not to be compared with the powerful bending of the hazel rods. The action of a stream of water on a galvanometer is a matter of pure physics on which it is needless to insist. If there is any such action it is extremely feeble, and it seems impossible to attribute the powerful flexion of the hazel rod to these minute electrical reactions.

There is much more also that is very obscure. Rods of different kinds are not equally suitable, which would seem to indicate some physical action on the rod itself; for if subconscious muscular action were alone concerned it is not apparent why a copper rod should function worse than one of hazel and better than one of iron.

We must, however, conclude with Chevreul and Barrett that there is no movement proper to the rod independently of human muscles; and we still ascribe the phenomenon to unconscious muscular contraction. The dowser often opposes, or seems to oppose, the movement of the rod. Mr. Lemoine says that it turns despite the will of the operator, sometimes so strongly that he can hold it only with difficulty; he may even find it impossible to hold it at all.

This fact is analogous to the occasional violent movement of a table when a powerful medium barely touches it.

Lemoine records that at the end of the experiments the hands of the Abbé Caubin were covered with callosities, not on the palms only but at the articulations of the fingers also.

Some dowsers are convinced that the rod turns of itself without muscular contractions, and it is to be noted that a silken or woollen glove stops the action. But the opinion of these professional dowsers, though not to be disregarded, is not to be taken on faith; they are evidently sincere, but they cannot be aware of their subconscious movements. The matter is as difficult to settle as whether the movements of a table are due to muscular contractions when the medium is hardly touching the table.

It will be seen further on that some (exceptional) mediums produce raps and movements at a distance. If the force acting

on the rod is not due to muscular contractions, might it not be due to a special kind of telekinesis? Evidently the forces acting on the rod only act through a human intermediary. It would be interesting to carry out a methodical investigation whether dowsers could act as table-mediums and conversely; that would be a new experiment worth trying. It would seem not impossible. According to J. de Tristan and H. Mager, about 20 per cent. or more of ordinary persons can act as dowsers. Experiments in this direction would certainly give useful data.

If it were proved that the rod is not actuated by human muscles then it would be a true case of telekinesis. H. Mager has attempted to show that forces capable of turning the rods emanate from matter. He has even tried to indicate the direction and potential of these forces. This would be a physical phenomenon absolutely new and unknown; but his argument is feeble, or even futile. A human agent has always been necessary, there is no bending of the rod without the dowser. Therefore, as a rod which can turn does not turn when put into a machine, and as the hand of the dowser is indispensable, we must perforce admit either that the action is muscular or that it is a human telekinesis.

Between these two hypotheses I do not hesitate. Although I have no personal experience, I put the opinion of the scientists above that of the dowsers; these think that the rod moves of itself, those that it turns because the muscles of the dowser turn it.[1]

3. *Concerning Rhabdic Force*

The movements of the rod, then, are due to the unconscious muscular contractions of the individual holding it. It is therefore averred that subterranean waters and metals deep in the earth or hidden in boxes exert an action on our subconsciousness, and that this mysterious action is an unknown physical force, for it is neither humidity, heat, nor electricity.

Such a force emanating from objects is entirely unknown; its existence is hypothetical, but the hypothesis is necessary, for without it, if there were not some determinate energizing influ-

[1]See Chapter XVI (very obscure) of H. Mager and J. de Tristan, *Recherches sur quelques effluves terrestres* (1826), et les *Comptes rendus du IIe congrès international de psychologie expérimentale de* 1913.

ence, we could not connect muscular movements with a real external fact with which they are obviously in close relation.

This rhabdic force has been studied sufficiently for some indication of its laws to be even now possible.

Everything takes place as if there were conduction of this force from the ground through the human body; and as if this force, like electricity and heat, could be stopped by gloves of silk or wool, or by india-rubber soles to the shoes.

This force does not emanate only from water. The old trials were almost invariably to find water, but recent experiments have shown that metals also have definite reactions.

These reactions differ according to the metal used. This has been proved by J. de Tristan, H. Mager,[1] and Paul Lemoine.

The results obtained independently of each other by H. Mager and P. Lemoine, aided by the Abbé Caubin, agree closely. Taking one gram of gold as sufficient to act on the rod, the quantities of other metals necessary to produce the same results are as follows:

Silver	1.2 grams
Nickel	6 grams
Aluminum	15 grams
Zinc	40 grams
Lead	75 grams
Copper	125 grams

These figures must not be taken as exact, like magnetic measurements, but they are sufficient to show that rhabdic force is amenable to physical measurement.

This establishes a fact of the first importance—that a certain force emanates from metals, sheets of water, and metallic salts, and this force acts with sufficient energy on the organism of certain persons to induce strong unconscious muscular contractions.

There is no effect without its cause. If subterranean water induces deflections of the rod, it must act as a cause—that is, as a force—on the rod. Evidently the action is by the intermediary of the muscles, but that does not make it the less true that there is a new physical force whose direction and conduction can be measured.

[1]See H. Mager, *Les moyens de découvrir les eaux souterraines et de les utiliser,* Paris, Dunod, 1912.

This rhabdic force certainly does not act directly on the muscles, but on the nervous system that moves them; the muscles are the passive agents of the nervous system, and we are thus brought to an inference whose importance no one can fail to grasp—that there emanates from metals, water, and metallic salts a force that acts on the nervous system. This we will call rhabdic force.

To study the phenomenon somewhat further: Is this a direct action on the unintelligent nervous system? Or is it an action upon the subconscious intelligence which then elaborates the notion received?

These are not the same. A signal light only shows us the way because we understand its meaning: its feeble light would not, of itself, determine any motion; and if the sight of it causes us to quicken our pace that is because by a complicated psychic reflex the intelligence has answered to the signal. It seems probable that the inflection of the rod is of this kind, and if the muscles bend it energetically that is not because the nervous system is directly influenced but because the subconscious intelligence has been awakened by the rhabdic force. A *notion* has been received by the subconsciousness, elaborated there, and transformed into muscular contraction; it is certainly not a crude stimulus to the nervous centres. The subconscious intelligence intervenes to transform a feeble stimulus into a powerful one.

The pendulum can be employed instead of the divining-rod with similar results. In the hands of a sensitive, while seemingly inert, it suddenly begins to vibrate on passing certain places; sometimes this vibration is so powerful as to whirl it about. The movements are due to unconscious muscular action, so absolutely unconscious that the operator is himself much surprised. The pendulum, like the rod, is only the indicator of a kind of nervous excitement.

This excitement is sometimes so violent that certain sensitives, as M. Viré tells me, are taken with a kind of convulsion on passing over a subterranean spring whose location is unknown to them. Such hyperesthesia is very rare; but a considerable number of sensitives feel a shudder or tremor.

Thus the perturbation of the nervous system produced by rhabdic force approaches cryptesthesia: instead of remaining a simple sensation it is a sensation accompanied by a cognition of actualities, this cognition being always subconscious. This is

proved by the fact that if a metal (e.g., iron, gold, or copper) is placed in the hand holding the pendulum and causing it to oscillate, the pendulum will only move on the sensitive passing over a mass of the same metal. If water is sought it will suffice to hold a bottle of water; if seeking a cavern or grotto the sensitive will take a small empty tube in his hand, which is comic enough. The fact of the ability to discern more or less accurately the presence of bones, grottos, pieces of cast iron, ingots of gold, and water-springs is more than nervous excitation; it is a knowledge of actual things—in a word, it is cryptesthesia. Therefore the studies that have been made on the divining-rod are a most valuable contribution towards a theory of cryptesthesia. Divination by the rod is a form of pragmatic cryptesthesia.

No one can deny the existence of forces in being which have been called telluric[1] but which I prefer to call rhabdic (Gr. ἑάβδος = a rod), which move the cryptesthesia of the dowser, just as the contact with a given object enables a sensitive to acquire cognitions that his normal senses could not reveal.

4. *Deductions from the Point of View of Cryptesthesia*

At first sight the study of the divining-rod would have seemed outside metapsychics, but the existence of rhabdic force brings us back into its full current.

In the chapter on pragmatic cryptesthesia (psychometry) I have indicated that things certainly exert some action on intelligence. If a medium or somnambule is given some object that has belonged to a person, A., they will give characteristics of A. that could not have been reached by normal means. I call this "*pragmatic* cryptesthesia" (Gr. Πεᾶγμα = a fact, a thing done), because it seems connected with an unknown emanation from actual things. Pragmatic cryptesthesia is far from explaining all lucidity; in fact, it explains very little; but it incontestably exists.

I conclude, therefore, that the divining-rod is an instrument that can arouse pragmatic cryptesthesia: i.e., it can reveal facts about things that our normal senses cannot reveal. The study of the modes of transmission, the resistances and obstacles to this flow of force show that careful analysis may give us precise data on the unknown forces emanating from things, which, if they

[1]This is the word used by Professor M. Benedikt, *Ruten und Pendellehre*, 1 vol., 12mo, Hartleben, 1917.

cannot touch our consciousness, can at least react upon our organs.

The analogy is remote between the force that proceeds from a subterranean spring and causes the muscles of a dowser to contract, and the mysterious emanation from a lock of hair, a watch or a ring which tells a medium that the article in question has belonged to Marguerite, George, or Robert, and gives some indications on these personalities. But both phenomena are of the same order of magnitude.

I do not say that they are the same. I say that the movements of the rod are pragmatic cryptesthesia, not that they explain the movements of a table; but two laws emerge which, if well understood, give a definite point of departure for metapsychics:

A. Unknown forces emanate from things, and these forces are amenable to measure and comparison by physical means.

B. These unknown forces do not affect our conscious senses nor our physical instruments; nevertheless they act (according to unknown laws) very energetically on the subconscious organism so as to produce cognitions that the normal senses cannot give.

Dowsers may be compared to table-mediums, for there is considerable similarity between them. The rhabdic force that acts on a human organism and produces muscular contractions reveals to consciousness facts that consciousness alone could not reach; and similarly a medium gets, through a table, answers that amaze himself.

Therefore, alike for the divining-rod and the moving table, the unconscious muscular action is a revealer of vibrations which the emanations from actual things arouse in our subconscious intelligence.

This chapter on the divining-rod is much abridged; this important question should have been developed at much greater length; but my book is already so long that I could not give more space to the subject.

CHAPTER V

Metapsychism in Animals

It may be questioned whether there is an animal metapsychism distinct from the human. The question deserves consideration because the strange phenomena presented by the Elberfeld horses and the Mannheim dogs have been referred to mediumistic causes. We think that this problem—as interesting as it is obscure—does not belong to metapsychics. Nevertheless, mention of the facts must be made, if only to decide whether to retain them or to dismiss them.

About 1892, at Berlin, William von Osten made known some strange facts; he had taught a horse (*der kluge Hans*) to reckon. A scientific commission was appointed, which settled nothing. The matter would have rested there had not an ingenious and enthusiastic merchant of Elberfeld, one Karl Krall, resumed Von Osten's experiments and devoted much skill and energy to developing the arithmetical powers of certain horses.[1]

The facts relative to the power of horses to calculate are given very briefly, as follows:

Four horses were trained by Mr. Krall, named *Muhamad, Zarif,* a pony *Hänschen,* and an old blind horse *Barto.*

These were able to solve simple arithmetical problems, and even some very complicated ones. They gave their answers by striking blows with their hoofs: thus to give "54" they would strike 5 times with the left and 4 times with the right hoof.

They could add, subtract, and multiply, and also extract square roots, which latter is perhaps only seemingly more extraordinary.

[1]The bibliography is already extensive. See Krall's *Denkende Thiere.* The numerous polemical articles aroused by this work cannot be cited, but O. Pfungst's book deserves special mention. Maeterlinck, who went to see the horses, wrote on them in *The Unknown Guest;* and C. de Vesme has summed up the questions raised (*A. S. P.,* 1912, 352-363, and *A. S. P.,* 1913, 117-128). There are two admirable articles by E. Claparède in the *Arch. de Psychol. de Genève,* 1912, xii, 263 and 1913, xiii, 244-284. See also E. Duchatel on *Les animaux savants de Mannheim* (*A. S. P.,* 1913, 289-303). There are also several works in Italian. These references, however, give only a slight idea of the volume of comment on the subject.

Mr. Assagioli, alone with the pony Hänschen, wrote on the blackboard 33+44 and Hänschen answered 77. Then he wrote 12+33+33 and the animal replied 87, the digits 8 and 7 being interchanged (which is often the case), 87 for 78.

In the absence of Mr. Krall and the groom, Muhamad gave M. Claparède the fourth root (!!) of 456,776, and the cube root of 15,376.

Maeterlinck wittily describes how he named a chance number for Muhamad to give its square root, but the horse did not reply, the number having no exact square root; a fact that vastly astonished M. Maeterlinck.

But there is more yet. The Elberfeld horses, by choosing cards with letters on them, could carry on conversations; they spoke by the alphabet, phonetically without vowels.

Their conversations are curious, as one may well imagine. One day Muhamad denounced the groom for having struck Hänschen. Sometimes they say they are tired and will not answer. They knew one person present to be a lady because "she had long hair."

All this is very odd; but before going further we must enquire whether there is trickery or illusion.

Trickery by Mr. Krall may be ruled out. All observers of the horses, even the sceptical ones, agree in this. His honesty is unquestioned; he often left the horse and the observer alone together. This was the case in many experiments. The presence of Krall or the grooms was not needed for correct replies. Sometimes the horse was left quite alone in the stable and was watched through a glazed chink in the wall.

The solution reached is often too quick even for a good arithmetician. Mr. Krall wrote on the blackboard $\sqrt[3]{91125}$, the number given him by M. Assagioli, and in a few seconds Muhamad gave the correct answer.

In presence of these astonishing and improbable facts, the official German scientists drew up an equally astonishing protest. Twenty-four professors signed this ridiculous document and *among these there were only two who had seen the horses.* Those two had the right to say that Krall's observations were illusory, the others had no right to say anything.

Their protest brings nothing new towards a solution; they say that to allow that horses can calculate like men is subversive of the evolutionary theory. This curious manifesto is reprinted by Claparède (*loc. cit.*, p. 265).

We may lay down the following provisional conclusions:

1. The hypothesis that the horses are trained to answer by a system of signs can be completely put aside.

2. Neither is Pfungst's hypothesis, that they respond to unconscious signs by the experimenters, any more useful.

The horses have often answered when no witness at all was with them and therefore no sign at all could have been made.

A methodical analysis of the conditions under which replies were given has led Claparède to the following statements that bear on a possible theory:

1. After four to six months of schooling the horses make no further progress. Krall considers his pupils as having the mind of intelligent but ignorant children, from six to eight years old.

2. They can invent nothing and can only do what they have been taught. However complicated the process of extracting cube roots, it is not beyond the powers of any moderately intelligent child of ten, after some months of teaching.

3. They are often unable to solve very simple questions; such as to say how many persons are present in the stable, though this is much easier (to our anthropomorphic notions) than the extraction of the fourth root of 456,776.

4. They do not seem to work out anything; they hardly look at the figures on the blackboard. Ferrari and Probli have emphasized this inattention on the part of the horse *Tripoli* whom they endeavoured to train in Italy after the Elberfeld manner. *Tripoli* replied after a careless look at the blackboard.

5. The errors made are often transpositions of figures, as if they were errors in reading. When the animal is not sure of the result it strikes a timid blow, but strikes strongly when sure of the answer.

In view of these incoherent results, we must remain uncertain as to the mechanism of the facts, as we have so often had to do in other metapsychic questions.

Nevertheless, on the positive evidence of such good observers as Claparède, Ferrari, Edinger, Ziegler, Assagioli, Hartkopf, and others, I incline to think that the horses really calculate and that the arithmetical operations are manifestations of their intelligence.

Moreover, it is not only horses that are capable of such calculations. Krall thought that the elephant, which shows such remarkable intelligence, might give better results. He got a young

elephant, *Kana;* but the youngster was very lazy and gave only blunders! The dog *Rolf,* of Mannheim, and the cat *Daisy* presented some curious facts of the same kind. Rolf would appear to have made it known of his own accord that he could reckon, and had learned to do so by hearing the lessons given to a child (*Buchstabierende Hunde, Psych. Studien,* 1918, xlv, 142).

We cannot suppose that Muhamad, Rolf, Hänschen, and Barto were exceptional beings; if they gave proof of intelligence it is fairly certain that other animals could do the like. Then why are not these feats repeated? Why are they isolated facts, both in science and legend?

If this arithmetical aptitude were a real phenomenon and no illusion, it should be possible to make hundreds of calculating horses. But this is not done, no others have followed. Why, if it is not an illusion?

This seems to me the most serious objection that can be put forward against the facts alleged by Krall, an objection so grave that it almost negatives them.

The uncertainty of the facts makes any theoretical treatment necessarily brief.

The opinion has been expressed that the phenomenon is telepathic. This is quite inadmissible: Grabow obtained exact answers on numbers presented to the animal that he himself did not know; and in certain instances the horse gave them when alone in the stable. There is no valid reason for seeking to apply telepathy; the obscure is not explained by the more obscure.

C. de Vesme has advanced the ingenious hypothesis that the process is mediumistic. After all, since there are intelligent raps producible from a table, why should not this power put the brain and muscles of a horse into action much as it causes the vibration in the wood of the table? In this connection De Vesme quotes the instance of a young man of nineteen belonging to an honourable family, who could readily obtain through the planchette in three or four seconds the total of several numbers each of six or seven figures that would have taken several minutes to add up on paper. The subconscious automatism worked more quickly than the conscious mind could do. De Vesme therefore thinks that the Elberfeld horses show a mental automatism similar to that of a medium, and this seems to me worthy of acceptance; though, truth to tell, it is not an explanation.

In any case the automatic arithmetical intelligence of the animals

does not imply a metapsychical phenomenon—i.e., the action of an intelligent force differing from known forces.

We know little or nothing about animal intelligence; its limits are undetermined, and if a horse or a dog can do what a child of ten can do, when duly trained, that only indicates a great extension of animal intellectuality.

I should therefore say that the arithmetical intelligence of the Elberfeld horses (if it exists, as it is possible that it does) proves that horses are capable of calculation and reasoning, but that this does not exceed the capacity of young children. It is extraordinary, and seems unlikely, but this has nothing to do with the metapsychic science that opens on unknown worlds.

CHAPTER VI

Sporadic Cryptesthesia

A. MONITIONS[1] (I. ON MONITIONS IN GENERAL)

1. *Classification and Definition*

A study of cryptesthesia that failed to take account of that form of it which occurs in normal individuals apart from any experimental intention, would be very imperfect both with regard to the fact itself and to the various forms under which it is manifested.

We shall apply the term "monitions" to these phenomena of sporadic cryptesthesia, without implying the hypothesis of an external monitory will; and shall treat them in three sections:

1. Monitions on trivial or serious matters other than death.
2. Monitions of death.
3. Monitions that probably have material objectivity, since they are collective—i.e., observed by several persons at once.

I intentionally do not use the word "hallucination," even qualified by the epithets "veridical," "telepathic," or "symbolical." It seems to me that the term "hallucination" should be reserved to describe a morbid state when a mental image is exteriorized without any exterior reality.

In so-called veridical or telepathic hallucinations the fact of their correspondence with some near or distant external event shows that there is some objective external reality that conditions the hallucination. It is of no consequence whether we know the nature of the force or vibration that transmits the knowledge or not.

In hallucinations produced by absinthe, or alcohol, in those of general paralysis, acute mania, somnambulic suggestion or dreams, there is no external cause; the cause and effect are

[1]According to the Latin etymology, the word "monition" means no more than "warning." This does not necessarily imply an external intervention. It is applicable to a warning proceeding from the subconscious intelligence which acquires, by cryptesthesia, the cognizance of an external event and presents it by a symbol.

anterior to the brain. Hallucination is one of the most distinctive symptoms of insanity, and occurs in nearly all forms of delirium. It occurs after some forms of intoxication; under hashish the illusions are so powerful that they become real hallucinations; belladonna and atropine, in strong but not fatal doses, produce passing hallucinations; long and persistent hallucinations can be provoked in somnambulists, causing them to live in a dream, and dreams much resemble hallucinations. To dream when awake and not to know one is dreaming is to have a hallucination.

But all these have no objective reality. When a dipsomaniac sees rats, hears their squeaks and feels their bites, there are no rats. When a hypnotized subject is told to go up the steps into a house and take a seat on the sofa, there is neither house nor steps nor sofa. When a lunatic hears voices, there are no voices.

It is extremely rare that a person who is neither ill, nor drunk, nor hypnotized should in the waking state have an auditory, visual, or tactile illusion of things that in no way exist. The opinion of alienists that hallucination is the chief sign of mental derangement, and the infallible characteristic of insanity, seems to me well grounded. With certain exceptions (for to every rule there are exceptions) a normal, healthy individual when fully awake does not have hallucinations. If he sees apparitions these correspond to some external reality or other. In the absence of any external reality there are no hallucinations but those of the insane and of alcoholics.

But we must be clear what we mean by objective reality. To take a concrete instance, when Mrs. Bagot at Mentone sees her little dog *Judy* cross the room at the very time that *Judy* has died in England, that is not a hallucination in the proper sense of the word, for it corresponds to a real event. But we are not going to imagine that there was a phantom *Judy* in the dining-room at Mentone emitting the mechanical and luminous vibrations that correspond to sight. The nature of the external fact that caused Mrs. Bagot to see *Judy* is quite unknown and is probably quite different to the genesis of a phantom. Nor shall I assert, like some out-and-out spiritualists, that *Judy's* astral body has appeared in Mentone. All the same there is some relation between the death of *Judy* and Mrs. Bagot's vision. It is a monition which, by some mysterious and unknown means, has touched Mrs. Bagot's mind and has presented itself under a form adapted to human intelligence, i.e., by a visual phenomenon.

The vision cannot be compared to that of a lunatic, for there was an objective reality (*Judy's* death) which was causative of a vision at once veridical and symbolical.

We shall therefore employ the word "monition," not "hallucination," to all these cases of veridical and symbolical hallucination. Thus regarded monitions can be considered as cases of lucidity; but they differ from lucidity as previously studied in two important respects:

1. They are not experimental but accidental. The data that we have on them depend on sporadic observations and not on methodical experiment. We shall therefore define monitions as phenomena of sporadic and non-experimental lucidity.

2. To move the mind of the percipient there must be an objective phenomenon of some kind, but this (in most cases) has no resemblance to usual objective phenomena.

When Mrs. Hutchins sees her husband and hears him call "Mary, Mary" at the very time that he has suddenly died, it must be admitted that this is not the ordinary mechanical and physicochemical fact of a bodily presence that speaks. It is some force in action near Mrs. Hutchins, inducing the image by cryptesthetic emotions whose bearing we cannot fathom. This unknown vibration has reached the mind of Mrs. Hutchins, but would doubtless not have reached another person.

In certain analogous cases the exterior fact resembles ordinary objectifications, and in such cases the effect is produced on other persons collectively. Such is the case of Mme. Telechoff, whose five children and dog perceive the apparition of a little boy, *André,* floating high in the room, the child having died in a house near by. In this case there certainly was a real phantom with real outlines like a living person, which might probably have impressed a photographic plate.

It is therefore not possible to draw an exact line of demarcation between the subjective and the objective; some monitions have a close relation to both.

1. Monitions are all objective in a certain sense, but it is a special kind of objectivity, having no relation to what we call ordinary objectivity.

2. If we use ordinary language and limit the term *objective* to those physical vibrations that ordinarily affect our senses, we should then say that nearly all monitions are subjective.

While admitting, then, that all classification is artificial, we shall

class as subjective all the non-collective monitions in which a visual, auditory, or tactile image has not been excited by an external force similar to the mechanical, physico-chemical forces of the usual known kinds.

But these sporadic monitions have certain characteristics too closely analogous to collective monitions and to experimental materializations for us to be justified in eliminating the hypothesis of a materialization, or something like it in many monitions, simply because it may be convenient to do so. This will be discussed later on; in this present chapter we shall class monitions among subjective phenomena, setting theory aside for the present, but taking note of the two double characteristics (1) that they are accidental and not experimental, and (2) that they are connected with some real fact inaccessible to the percipient by normal means.

2. *Conditions Necessary that Monitions Should Be Regarded as Such*

The first condition is the honesty of the witnesses. With the rarest exceptions it is not possible to suppose that the stories have been invented. It is possible, though unlikely, that among the thousands of cases reported, perhaps ten may be due to practical jokes, but I am disposed to think that there has scarcely ever been intentional invention.

But, on the other hand, inaccuracy is as certain as honesty; and this is a source of grave error.

A story that comes to us at secondhand, having passed through two or three persons' imagination and memory, the one inventive and the other treacherous, is sure to be distorted. In spite of oneself, there is a tendency to make it more effective by adding details and suppressing others. In the great majority of cases the honesty is indubitable, but so is the inaccuracy. Wilful deceit there is none, but self-deception is almost always present.

I will instance the log of the three-master *Jacques Gabriel.* The log contains the following annotation, but written with different ink, "On arriving at the Mauritius, we learn the death of the wife of the second officer, M. Pénaud, deceased on the same day and hour at which the noise was heard." In the log under date of *July* 17th the entry states that while at sea the voice of a woman had been heard on board. Now the register of deaths at Paimbœuf indicates that Mme. Pénaud died on

the 16th of *June*. So that Captain Mangot, commanding the vessel, no doubt in good faith, but disregarding the necessity of being absolutely accurate in all matters of science, mentions the events as simultaneous, though there was a month's difference between them.

There are certainly a number of cases analogous to the foregoing which, as no written evidence was taken at the time, must be accepted with considerable reserve; but these reservations have less to do with the fact itself than with the moment of its occurrence, which, if coincident with the event, would show a connection in time with the objective reality. It would therefore be injudicious to reject all the cases in which written documents are wanting; for memory, which is unreliable as to precise dates, is trustworthy for many other details.

It is also remarkable that monitions, whether because of their somewhat dramatic character, or because they have been spoken of several times, or for some deeper reason, are deeply graven in the minds of the percipients, so that they are still vividly and accurately remembered after the lapse of even as much as thirty years. There will be some distortion, but the fundamental facts are correctly retained; the narrator may forget whether the lamp was alight or not; whether the weather was bright or rainy; whether he spoke aloud or kept silence; but the essential facts remain. No doubt illusions arise on the exact correspondence of hours, or even of days, but these variations from accuracy, though they are not unimportant, do not change the essential character of the fact itself.

Another point, which is perhaps more difficult to clear up, is whether in any given case it was actually impossible that the event in question should have reached the mind by any ordinary channel. The following case, for instance, seems one in which a subconscious rememberance seems sufficient to account for the facts:

Mr. Newnham during a walk at Haughton had gathered some violets for his sick wife. Twelve years later as he was walking in the same place, and thinking of the violets once gathered there, his wife said to him, "I smell violets in the hedgerow." This was no doubt a subconscious remembrance by Mrs. Newnham (or possibly a coincidence). She said, no doubt quite sincerely, I had completely forgotten the fact," but the subconscious memory forgets nothing. Each case should be considered on its own merits.

Very often the facts relate to a person who is very ill or near death, and then a real hallucination is possible; but this possibility must not be exaggerated.

In the first place, people in a normal state do not have hallucinations; and further the correspondence between the hour of death and that of the monition is sometimes so exact that it could not be due to so-called hallucination. Mr. Williams knew that his brother-in-law, George, was very ill, nearly dying. One morning he sees George standing at his bedside, and says to his wife, "I have seen George, he came for a minute at sunrise." Far away George had died in the arms of his father, who wrote, "The sun was rising when my dear son left us for the heavenly country." The event and the monition were so exactly simultaneous that Mr. Williams's knowledge of the imminence of death detracts very little from the authenticity of the monition.

O. Houdaille, called to the bedside of his grandfather who was very ill, while in the train taking him to Mirecourt, hears a deep sigh, gets up, looks at the time, and says to his brother, "It is one o'clock; grandfather must be dead or dying." Mr. B., the grandfather, entered into the death-throes at one o'clock precisely.

Even if we eliminate the cases in which a death is expected (and there is no real reason to eliminate these), there remains a large number in which the recipient of the monition believed the person in question to be in good health or very slightly indisposed. Thus when Mr. Z. left his young friend, B., B. was in perfect health. They had talked of trivial matters; but two hours later Z. had a terrible dream at the very moment that B. committed suicide.[1]

Monitions might be divided into the foreseen and the unforeseen; the former being those in which death was expected, and the latter those referring to a person in good health; but the resemblance, not to say the identity, of the modality of monitions in both cases is such that the phenomenon is the same in both, and it would be irrational to reject monitions of likely facts merely because they are likely. Is the knowledge that a brother is very ill or dying sufficient to evoke his wraith? "Expectant attention,"

[1]I have an impression, which should be supported by statistics, that monitions are more frequent in cases of suicide. This might be better known if families in such cases were not careful to conceal the fact and the circumstances that led to it.

to which so many marvels are attributed, really cannot cause a normal person to see a phantom or hear a voice. We must admit monitions into the realm of metapsychics even when they refer to probable facts.

Nevertheless, whenever a simple and non-metapsychic explanation of a so-called monition can be given, it should be adopted. In other words, the criticism of such facts must be stringent.

Mr. Barwell and Mr. Earle see their friend W. at the carriage-door of a train just as it is starting: W. waves his hand to them and the train is soon out of sight. At that very moment W. falls into syncope at his own house. But this is not enough to establish that W.'s double was in the departing train. It is possible that some stranger who resembled W., seeing signs made to him, answered them by a wave of the hand. This is much more likely than an apparition; and this story must be rejected.

The very interesting case of M. Noell, a young student of pharmacy at Montpellier, who saw one night his dying sister and heard her call to him, has a defective side. Telegrams had been sent him announcing his sister's serious illness, but the servant who should have given him the telegrams had stupidly put them into a drawer. One cannot be certain that M. Noell had not half unconsciously opened the drawer and read the telegrams. This is improbable but not impossible, and is sufficient to make the case a doubtful one.

Even if the non-metapsychical explanations are far-fetched and unlikely, provided they have some remote possibility, they should be accepted in preference to calling in mysterious faculty.

Thus the Rev. Mr. Killick thinks he hears a voice telling him that his daughter Etta is drowning. Some months later he learns that at that very time his daughter had been in imminent danger of being drowned. May not this be a fact of paramnesia—an illusion of memory? May not the extent of the danger to Etta have been exaggerated?

Dr. J. Smith hears a voice that repeats three times, "Send some bread to James Gandy." He then sends the bread to Gandy, whose existence he barely knew of, and finds him in a state of destitution with his children crying for bread. But it is possible that Dr. Smith may have known that Gandy was in want, and the auditory admonition does not necessitate cryptesthesia.

Each particular case of sporadic cryptesthesia needs special critical treatment. This has been done by the authors of *Phan-*

tasms of the Living, by Camille Flammarion, by the editors of the *Annales des Sciences Psychiques,* and by the members of the S. P. R., before making public the facts recorded by them. This criticism, however, has not prevented the publication of some weakly authenticated facts that seem to support others that are quite well evidenced. I have endeavoured in this book to give only those against which little can be alleged; but among them are still too many which, if they stood alone, would have little weight.

As our chief aim is to prove the reality of cryptesthesia, we shall not take into account vague and indefinite cases. Thus, Mrs. Martyn has an intense feeling of horror and fear. She cannot assign any precise bearing to this; but next day she learns that someone that she had not seen for two years has died. This cannot be called a monition; it may have been one, but there is no evidence for it.

The same must be said of the Rev. Mr. Wilson, who had a vague but strong sensation of illness at the moment of death of a twin brother. He says, "It was a panic fear; I shuddered as at the approach of death. My brother died fours hours before this painful terror seized me." That this may have been a monition is probable, seeing that the brothers were twins; but Mr. Wilson did not connect his sensations with his brother, and it is best to infer simple coincidence.

Vague monitions which do not connect with a real and definite fact totally unknown to the percipient do not amount to lucidity. We shall not call them monitions, for that word is reserved to the cognizance of a real external fact. Cases in which the percipient has no intimation of the external fact itself cannot be taken as monitions.

(a) The Hypothesis of Chance Coincidence

It is frequently objected that monitions may be due to chance. It is desirable to give this objection its full weight:

"In France, as in England, there are about 1,500,000 deaths annually and a thousand times as many falls, wounds, serious accidents followed by fainting, loss of blood, and delirium, without counting the minor incidents to which many monitions refer. This amounts to some 1,500 million cases. As the enquiry extends over about sixty years, there are about a hundred thousand

millions of casual events that might be the subject of monitions. Now it has only been possible to ascertain (with difficulty) about 500 cases; therefore, the ratio of actual to possible cases is 500 to 100,000,000,000, or 1 : 200 millions or less. Therefore, alike in France and in England only one two-hundredth-millionth, or at most, one hundred-millionth, of possible cases has eventuated. This is a very small number; so small as to be negligible, and if all the inaccurate observations, exaggerations, and defects of memory were eliminated, the number would be much smaller still."

This objection somewhat resembles the remark of the sceptic who, seeing the votive offerings of sailors saved from shipwreck to their patron, St. Peter, asked to see the names of those who were drowned in spite of their prayers.

N. Vaschide has been unable to obtain any positive evidence, and his criticism is not very logical. Against all common-sense he begins by denying probabilities, and then he invokes the calculus of probabilities to support his denial. Then having found on enquiry that the hallucinations he has brought forward were not veridical, he concludes that the enquiry conducted by the S. P. R. is illusory. But in such a case science cannot prove a negative and I can only compare his negation to that of the Venetian doctor who replied to Harvey that the heart might be heard to contract in London, but that in Venice nothing of the sort could be perceived.

We may reply to Vaschide:

(1) The number of persons who for one reason or another, by indifference, laziness, inattention, or fear, do not give their testimony is very great; but the number who have never heard of the enquiry is enormous. Among the persons passing through Trafalgar Square in London or the Place de l'Opéra in Paris, what is the ratio between those who have heard of an enquiry on veridical hallucinations, to those who have not heard of it? And how many among those who have heard would think of writing a letter detailing personal matters? Add to this the country-side and the small towns. It may be boldly averred, not one in a hundred thousand. The ratio stated by M. Vaschide then falls from one hundred-millionth to one ten-thousandth, which is very different.

(2) If, instead of taking cases of telepathy and monition bearing on various matters, we take only the premonitions of death,

accepting only those that are well supported by documentary evidence, we have about 250 cases. In sixty years there are said to be 750 million deaths. If, then, only one in ten thousand persons have been moved to action by the enquiry, the ratio is 250 : 75,000, say, 1 : 300. Such would seem to be near the proportion of those who have had a monition among those who might be expected to reply. One in three hundred is a small proportion, but it is no longer a negligible quantity.

(3) The hypothesis of chance coincidence becomes quite untenable when the time of the monition coincides exactly with the event. J. has left his friend F., when F. was very slightly indisposed. Soon after J. in his own home sees the apparition of F., and asks his wife, "What is the time?" Twelve minutes to nine." "Then," says J., "F. has died at 8.48. I have just seen him." In fact, F. has died between 8.35 and 9 o'clock, or, taking the mean, at 8.45. The times are exactly concordant.

The probability that J. should have one, and only one, hallucination in his whole life and that it should agree exactly with the time of F.'s death can be calculated fairly closely. There are 96 quarter-hours in the day, and 365 days in the year. Taking twenty years of J.'s experience that gives a probability of 1 : 700,000 against a chance coincidence. C. Flammarion (*Revue Spirite,* February, 1921), by another method of calculation reaches a probability of 1 : 800,000,000 on the same data; but whether 1 : 700,000 or 1 : 800,000,000, the moral improbability of chance coincidence is the same.

Is it not much more rational to suppose that J., who is neither a mystic nor subject to hallucinations, had at that precise minute a monition, the only one in his whole life, because some actual vibration awakened his dormant cryptesthesia?

(4) But the chief reason for dismissing the hypothesis of chance is that the details furnished by the monition are often so exact and so abundant that fortuitous coincidence is out of the question. Mme. Escourru at Paris, looking at the portrait of her son, sees the left eye bleeding and the eyeball out of its socket; and on the same day her son, a captain of Zouaves, is wounded in this very manner at the assault on La Puebla in Mexico.

Mrs. Green dreams of two young girls driving in a one-horse carriage drowned in a lake, their two hats floating on the water; and at that very time, the girls, one of whom is her niece, having gone for a drive with a friend, are drowned in Australia on the

other side of the world, the two bodies being located by the hats floating on the water. The probability against chance is so great that it amounts to moral certainty.

We never get mathematical certainty; it is not *certain* that a bag of type emptied on a table will not fall into the first line of the *Iliad*. This combination exists among those that are possible, but if it should occur no one would believe it due to chance.

(5) In a small number of cases some objective phenomena have accompanied the monitions; a fact which makes the hypothesis of chance quite untenable.

Mrs. Bettany sees an old woman in a long cloak crouching on the floor. Mr. Bettany sees the same, and both recognize Mrs. X. Is it possible that there was no external phenomenon? Is it likely that this was unconnected with the death of Mrs. X. at the same hour?

(6) The calculus of probabilities has been alluded to above. This method of reasoning, which may be misleading even on mathematical and abstract data, becomes entirely illusory when the complex and intricate factors of a monition enter into the problem. In such cases common-sense rather than calculation will give the solution. Mr. Wingfield Baker writes in his diary the initials of his brother, and adds "God forbid"; at the same hour his brother is killed in the hunting-field. The most elementary good sense will see a connection between the two events, and that the apparition of his brother was not due to chance.

If this were an isolated case it might, at a stretch, be supposed that chance might have induced an hallucination in a normal person (however rare such may be) and that this hallucination might have occurred at the moment of the brother's death. It is vastly unlikely, however. If the case were unique we might hesitate to draw a definite conclusion; but there are some hundreds of such cases and the repetition of similar coincidences excludes all idea of chance.

That at roulette the red should come up 80 times out of 100 on a particular day is enormously improbable, but no inference could be drawn; but if this, or something like it, occurred for a month, we should be quite sure that the wheel had been tampered with. In the case of the wheel the probability is calculable; in that of monitions it is not, but the inference is the same.

The study of experimental lucidity showed that the human

soul has a mysterious faculty in virtue, of which cognitions other than those due to normal senses and sensations reach the mind. The study of accidental lucidity leads to the same conclusion and corroborates it with irresistible force.

There are other channels of cognition than the habitual ones. That is a conclusion as well established as the most certain facts of physics, chemistry, and mathematics.

3. *Conditions Under Which Monitions Occur*

Monitions occur under the most varied conditions, nevertheless there are some points of similarity that will appear from the accounts here following:

(1) Visual monitions are usually in the shape of a nebulous form which allows of the background being seen through it, though in some cases the form is opaque enough to hide objects behind it.

(2) The details of the face are often very clear; the eyes, nose, wrinkles, the colour of the hair, and a happy or sad expression are readily distinguishable. Everything occurs as if the vision were of a living person in the material world.

(3) Sometimes the apparition speaks; sometimes a voice is heard. Sometimes, though more rarely, there is a tactile phenomenon, so that the impression of reality is complete, all the senses contributing to the perception. Often what the vision has wished to say is clearly understood without any spoken words having been definitely heard; just as in a dream one knows what is said without any remembrance of particular words.

(4) Very often the monition takes the form of a dream; and then the dreamer remembers the exact circumstances of the dream. Often the dream awakes the sleeper, without immediate disappearance of the apparition. Sometimes (rarely) as in Dr. Orsi's case, the monitory dream is repeated several nights in succession. It often takes place between sleeping and waking (*Borderland,* Maury's hallucinations).

(5) Recognition is variable; often the form seen is ill-defined, so that the percipient does not at first connect it with any particular person, but experiences vague disquiet and pain. Little by little the notion becomes more precise, and the visual phenomenon is linked to some person without that person having been actually recognized. He knows and understands that the

apparition refers to that person without being able to say how he knows it.

This difficulty in recognition is interesting, for it seems to prove two successive intellectual processes. In the first, the mind is influenced by some vibration that has a meaning, though the meaning is obscure. Then the sensation becomes more precise, but in order to become so—that is, in order to be transferred from subconsciousness to consciousness—it must be manifested under some form fitted to our mental constitution—a vision or an audition. Till then it will not be understood. Recognition has been secured because the subconscious has adopted the means of a symbolical hallucination to reveal a fact to the conscious self.

When recognition is doubtful cryptesthesia must not be invoked; it is therefore of primary import that the percipient should have formally related the monition to a witness, or better still, should have written it down, before the actual fact referred to has come to him by normal means.

Without clear recognition lucidity cannot be admitted. For instance, Mrs. Woodham sees a figure before her so distinctly that she wakes up and says aloud, so as to be heard by her sister sleeping with her, "Who are you? What do you want?" The next morning she hears of the death of an old servant of whom she was fond, and then she says, "It was she whom I saw last night"; but as she did not recognize the apparition at the time, the case is not evidential. Paramnesia is relatively common, and no good faith in the narrator can bring this to his knowledge, for the genuineness of the mistake constitutes paramnesia.

(6) Monitions usually refer to death, often to illness or serious accidents, and sometimes to trivial matters. But these latter also are monitions; and the monition of a trivial fact is as interesting *per se* as the monition of a death or a disaster, for monitions of trifling facts are often accompanied by precise details which certainly show cryptesthesia. For instance, M. sees his wife talking with a beggar who is holding a broom. The monition is in itself quite meaningless, but interesting from the abundance and accuracy of its detail.

(7) There is no essential connection between the vividness of the hallucination or the dream and the definiteness of the monition. There may be scarcely any, just as a very slight and passing internal perception may reveal an important fact, whereas

sometimes a vision may be very clear and perceived very vividly without being certainly referable to cryptesthesia. This contrast is very apparent in dreams; some are very vivid, having all the semblance of reality, but mean nothing at all, while other very transitory dreams may convey monitions.

(8) The period of latency between the event and the monition is variable. F. Myers thinks (while admitting it to be merely a hypothesis), that the telepathic impression is immediate, but that this impression remains latent in the mind of its subject, only emerging to consciousness after a certain interval either as a waking vision, or as a dream, or in some other manner. In nearly all cases, he says, in which a veridical phantom has preceded death, it has been a case of illness but not a case of accident; and then the process of dying, with its coma and convulsions, may originate the telepathic impression and so precede the stoppage of the heart that constitutes actual death.

In cases of accident the vision is almost always subsequent to death. Myers cites two cases (p. 273) that seem exceptions; but one of these may have been a premonition and in the other (suicide) Myers thinks that the mental agitation of the unhappy man may have been sufficient to cause the telepathic phenomenon.

If the time-curve of post-mortem apparitions were drawn, it would show a very rapid fall within the first few days after death, becoming almost *nil* for longer periods.

Possibly when the casual fact is near, the lapse of time is less than when it is distant.

M. Warcollier, analyzing the data of telepathic monitions given in sundry enquiries, draws up the statistics given below:

Agents	Men	194	64 per cent.
	Women	106	36 per cent.
Percipients	Men	161	54 per cent.
	Women	139	46 per cent.

He has also compared cases occurring in the waking and sleeping states, including in the latter, fainting, coma, and dying.

Agent.	*Percipient.*	*No. of cases.*
Waking.	Waking	7
Waking.	Sleeping.	13
Sleeping.	Waking.	19
Sleeping.	Sleeping.	59

He concludes, borne out by many personal investigations, that sleep or the borderland between sleeping and waking is favourable to telepathy or clairvoyance.

(9) Visual apparitions are of short duration; they usually last but a few seconds. Prolonged apparitions are very rare; such as the case of the sailor Spring, who saw on his ship, during a storm, the apparition of his father (who had just died on shore) which remained beside him on the bridge for two hours.

(10) Some monitions are certainly objective, and are seen by several persons. It is then very difficult, almost impossible, not to admit some external phenomenon similar to those ordinary phenomena that affect our physical senses.

M. Lemonnier, a chemist of Rennes, hears a loud noise at his door, repeated thrice. He gets up and see nothing. In another house, one of his friends, M. Nivot, at the same moment hears a similar noise that wakes him up; and both think of the death of one of their mutual friends who was dying at that time. Must we suppose that both, at different places in the town, were similarly hallucinated? Is it not likely that if other persons had been there they, too, would have heard the noises?

The son of Lady X., aged twelve years, sees a form passing across the room, and says, "Mother, it is the major." Lady X. also sees the form. I have already quoted the case of Mme. Telechoff with her five children and her dog *Moustache*. Mr. and Mrs. Bettany both saw the old woman in their room. Mrs. Paget and her two daughters heard the steps of Arthur in the passageway. Colonel Wynyard and Mr. Sherbrooke both saw Mr. Wynyard. Mr. Weld and his daughter both saw Philip Weld, who had just died, walking in the avenue. The mother and sisters of Colonel Aylesbury heard his voice. Mr. and Mrs. L. both heard the voice of their son. Mr. Done and Rosie both heard Mrs. Eustance call them successively by name; but it does not appear that Mr. Done heard Rosie called, nor that Rosie heard the words, "Uncle, uncle."

All the same, in spite of appearances, the existence of an exterior fact of the same order as ordinary exterior facts cannot be admitted in all these cases of collective perception, for the hallucination was different.

(11) Monitions are certainly nearly always entirely subjective. Mr. K. of the Royal Military College sees a woman being carried along, but his companion sees nothing. Mrs. Taunton sees her

uncle in the theatre between her and the orchestra. Mr. Taunton, sitting beside her, sees nothing and asks, "What is the matter with you?" Mr. B., taking tea with his son and daughter-in-law, sees a face at the window, but they see nothing. Miss Stella sees a boy enter; she speaks to him and offers him a cloak. Dr. G., coming in at the moment, is astonished and says, "To whom are you speaking?" Kate Sherman sees the apparition of her brother, and speaks of it to her sister resting by her side, but Elisabeth Sherman sees nothing.

Very often the percipient asks the people of the house if they have seen anyone entering or leaving, but almost without exception nothing has been remarked, though in all these different cases the apparition presented all the semblance of reality.

The cases of veridical and purely subjective apparitions are so many that if we had not to take into account experimental materializations, we might conclude that all monitions are subjective. But this term also must be cleared up, and this I shall endeavour to do in the section that follows.

4. *The Symbolical Form Taken by Monitions*

That a percipient should have cognizance of a fact that the normal senses cannot reveal, it is obvious that there must be some exterior vibration that has influenced his mind. It is therefore possible that these vibrations should affect others, and therefore that the monition should be perceived by more than one person. Certain collective monitions, but not all, can be thus explained. Mr. Done heard the voice calling, "Uncle, uncle," and at the same moment Rosie hears, "Rosie, Rosie." It would seem that the call heard by two persons at the same time used a different symbolism for each.

The tendency to symbolism dominates all monitions. Even in our normal state, as a great poet has said, we move in a forest of symbols. Cryptesthesia has to express itself symbolically to touch our consciousness: everything happens as though monitions, assuredly of mental origin, had to be adapted to our modes of understanding by being dramatized; and the fertility of invention displayed (for it is invention), which eventuates in a monition, must move our wonder.

E. Bozzano, to whom are due so many acute studies on different points of metapsychics, has emphasized their symbolical

forms; for instance Mrs. Thompson, whose faculty of cryptesthesia is strong, instead of giving the name "Merryfield" says Merry..man, Merry thought, Happy field (*A. S. P.*, 1907, 638).

I have mentioned the curious story of Mrs. X., who, being alone in her home, endeavoured while in a lucid state to discover the name of the person who had been speaking to me. She saw a well-defined human form which gave the name "Henry"; but at the same time she saw a herald-at-arms with a halberd, dressed in mediæval style, stopping other spirits anxious to come in from entering the room so that there might be no confusion with "Henry." [1]

Mme. A. one night dreamed that there was a ring at the door, and that the housemaid entered looking frightened, and said, "Madame, it is Death." Mme. A. felt that Death must not be kept waiting, and forthwith sees a coffin, and in it Mme. Gaston Tissandier, of whose recent decease she was ignorant.

Jean Jules Bigard dreams that he has died and that a clerk at the town-hall showed him the certificate, causing him to laugh. That same night his uncle Jean Jules Bigard was mortally wounded in the war.

The Rev. Mark Hill sees a man advancing on him so threateningly that he seizes a glass from the table and throws it at the head of the phantom.

Emma Burger sees her fiancé enter her room, the door opening and shutting.

Longet, professor of physiology in the Paris Faculty of Medicine, sees in a dream his friend Cloquet (whose decease was unknown to him) entering the room, throwing his books on the floor, and saying, "Now I need nothing more."

Mr. Weld sees his son Philip walking on the road with two imaginary persons.

Miss Barr sees a hand drawing her bed-curtain and on this hand a ring which she recognizes as belonging to her cousin, Captain X., who was dying in Canada from an accident (*Phant. of the Living,* 416).

Mr. Brighton in his cabin on shipboard has a very complicated dream in which he sees two forms descending on the ropes that held the hawsers of the boat. They emit musical sounds that

[1] C. Richet, Presidential discourse to the S. P. R., February 6, 1905, *Proc. S. P. R.*, iv. The name Henry was quite correctly given against (calculated) odds of 1 : 20.

change into cries of triumph when they have cast the boat loose. The boat then drifts away and is caught by a gust of wind. Mr. Brighton wakes up, jumps from his berth, and goes on deck. The night was calm, but the moorings were frayed. With much trouble Mr. Brighton and his friend found other ropes and secured the boat, thus avoiding a great danger. This is a good example of a symbolical dream, but it is difficult to see in it any cryptesthesia; probably a subconscious idea of the peril reached Mr. Brighton's consciousness under this dramatic form (*P. S. P. R.*, viii, 401).

Symbolical, too, is Mrs. B.'s dream of a dinner at which all the guests were talking except her uncle, A., who remained dumb. The same night her uncle died; she knew this only by his silence at the dinner (*A. S. P.*, xvii, 728).

Mrs. J. Adam sees the form of her grandmother, who shows empty eye-sockets to indicate that she has died (Bozzano, *A. S. P.*, 1907, xvii, 716).

The excellent examples of symbolism collected by Bozzano show the fertility of the subconscious mind for imaginative detail; a fertility much greater than that of the conscious mind. This is well seen in the infinite variety of dreams.

Mrs. Johnson, whenever she is perturbed by anxiety, sees a swarm of flies that fly up to her face. The illusion is so complete that she does not distinguish them from actualities.

Mrs. Wilve, wife of Dr. Wilve, sees a white and a black horse galloping across country with a carriage in which is seated a person about to have a serious accident.

Very often the idea of death is presented by coffins.

Mrs. A. sees in a dream her mother with three bouquets. She reaches out to take the second, but it falls to the ground. Mrs. A., who has three brothers, thinks of the second. He died shortly after.

An unlikely case of symbolism is reported by Flammarion (*La Mort et son Mystère,* p. 95). Mme. Maréchal at Paris, in a nightmare between sleeping and waking, sees a spectre that takes her by the arm and says, "Either your husband or your daughter must die. Choose!" After a terrible struggle she mentally decides to sacrifice her husband to save her child. Five days later, M. Maréchal, till then apparently in good health, dies. Flammarion says, "I questioned Mme. Maréchal and her daughter separately and I have no doubt of the authenticity of the story."

Mrs. Wickham while undressing feels a hand on her head and neck; cold lips are lightly pressed to hers and a voice says, "Adieu, adieu!"

M. Bard sees Mme. Fréville walking in the cemetery. Mr. Jones sees a coffin and in it the form of his sister. Mme. Beaugrand hears the sound of a terrible storm at the time when her husband perished by shipwreck. Mr. T. sees a tomb on which is inscribed the name of his friend. Lieutenant V. dreams that his friend, Lieutenant L., has fallen into a shell-hole, is surrounded by enemies, and is calling for help. Mrs. Paget hears the heavy step of her servant in the corridor stopping at the place where a gas-jet ought to be shut off. Mrs. Matthews sees Suzanne raise the bedclothes and lie down by her. The wraith of Spring's father comes on the bridge of the ship, touches his son on the shoulder, and says, "Look to your helm, Joe." Mr. Noell hears his sister call to him in a plaintive voice, "Come, Louis, do come."

All these appearances were monitions, for they corresponded with deaths and actual events which the percipients could not have known by any normal means.

It is probable, or even certain, that in all these cases there was no external physical fact that would have affected a photographic plate, a microphone, or balances. A phonograph would have shown no record. The monition, whose mode of genesis is quite unknown, was conveyed to the percipient by a symbol; and a symbol is the converse of reality. It corresponds to a reality, but it is not the reality itself.

One fact that seems to prove that hallucinations are symbolical, in most cases, is that visual hallucinations are clothed; they wear a usual (or an unusual) garb. They open and close a door. They raise the bedclothes. If there were a materialization we should have to admit a simultaneous materialization of clothes and divers objects, appearing at the same time as the phantom. That may indeed be possible, as is shown by experimental materializations, but it is certainly simpler to consider that this is not the case, but that all takes place in the mind of the percipient. It seems obvious that most monitions are entirely subjective, though I should not venture to say that all are; but those that are clearly objective are rare, or at least the objectification does not present the ordinary luminous, mechanical, and thermal phenomena. Even when the objectification is seemingly complete its objectivity must nevertheless be held doubtful.

Some minutes after the death of Mrs. L., three persons who were in the death-chamber—Eliza W., Charlotte, and Dr. G., who had attended the dying woman—heard for several seconds three women's voices singing softly, like the sounds of an æolian harp. Eliza W. even believed that she heard the words, "The strife is o'er, the battle done." Two of those who had left the room re-entered to hear the music. The night was still, and there was no one outside. Nevertheless, the phenomena were certainly subjective, firstly because Mr. L., who was present, heard nothing; and secondly, because each of the persons who did hear the singing heard it in a different manner (*Phantasms of the Living,* i, 446).

This case is particularly interesting, for it shows that there may be hallucinations which are very definitely subjective though perceived collectively.

We have not distinguished monitions received during sleep from waking monitions, for the borderland between sleeping and waking renders any hard-and-fast classification impossible. Very often they begin during sleep and are completed on waking; and sometimes conversely, though this is rare. Sometimes the percipient is startled into a kind of stupor which curiously resembles sleep.

Even when the percipient remains awake the vision resembles a dream; the same state of "credulity" (as De Rochas felicitously says) supervenes—an absence of astonishment which accepts the most unlikely things. The only difference between the mental state when dreaming and when awake is that in the former state the sleeper cannot fix his attention on the real objects around him; he is carried into an imaginary world and cannot correct the divagations of his thoughts by actual sensations. This absence of control is the essential feature of dream-states. The dreamer does not know where he is; he is not reminded of concrete realities by the mechanical and physical energies of the world about him. He cannot fix his attention and has no directing will. The mental state of those who receive a monition is very similar.

It would be absurd not to regard most monitions as subjective in the same way as dream-images are subjective. If in a dream we were to see a funeral, a coffin, and a brother in that coffin, it would be outrageously absurd to suppose any objectivity in these things. Why, then, should it be otherwise with a veridical hallucination? It is just a waking dream: and to say, "But

I was wide awake" is not a sufficient reason for thinking the phenomenon objective; as if it were impossible to build up a dream because one thinks oneself awake.

Whether produced in sleep, when awake, or in an intermediate state, monitions are always symbolical. The details of the vision have no more importance in themselves than the strange and fanciful details of dreams. Nevertheless, the narrator is perfectly right to insist on detail, for along with the essential monition there are often very precise accessory facts that define the meaning. In this singular admixture of reality and fancy, lucidity seizes not only on the central fact, but also shows a curious predilection for the accessory circumstances. Therefore the narrator should omit nothing, lest the most interesting point might perhaps be passed over in silence. And this applies to dreams also.

The symbolic character of monitions should therefore excite no surprise; nor should too much importance be attached to the form of the symbolism. The important thing is the lucidity, the cryptesthetic perception of a real phenomenon—a reality which imagination dresses up with details that are sometimes true to fact, and sometimes fanciful. I think that no better description can be found for monitions that take a hallucinatory form than to call them "waking dreams."

5. *Monitions and the Telepathic Hypothesis*

Although the authors of that admirable work, *Phantasms of the Living,* consider monitions as cases of telepathy and incline to think that there has often (if not always) been some effort on the part of the agent to transmit his thought to the percipient, I am far from holding this to be the most rational hypothesis.

Obviously it can be only a hypothesis. It is very easy to say A.'s thought is transmitted to B.; but as I have already indicated more than once, this proposition is by no means simple. Therefore, in our present state of ignorance of laws and causes, I adopt a hypothesis that prejudges nothing, and am content to keep within the limits that circumscribe our imperfect knowledge by saying B., by some unknown means, knows what A. has thought of, but he also knows much more: he knows what A. has thought of because that thought was itself a fact; and he can know that which no one has thought of: he knows that which IS.

I say to Stella, "Tell me the names of two servants who were

about me in my childhood." She answers (but only next day), "Mélanie." I was not thinking of Mélanie; for fifty-five years the name has never recurred to my memory. Is it not simpler to suppose that Stella has perceived the reality—the fact—than to think that she has read a subconscious thought in the deepest recesses of my mind? As a matter of fact I had two other names in mind—Dorothy and Louise. I did not think of the third woman, "Mélanie," at all.

When Mrs. Green perceives the death of two girls in Australia, is it likely that these two girls who had never been to England and did not know Mrs. Green (who was the aunt of one of them), should have thought of Mrs. Green with such vigour that this vibration travelled twelve thousand miles to her instead of affecting their parents quite close at hand?

Mme. Fréville barely knew M. Bard. Mr. Phibbs sees his dog *Fox* mortally hurt at the foot of a wall. It is much more reasonable to suppose that the notion *of the fact* reached his mind than that the soul of the dog went and acted on the brain of the man.

In fine, accidental lucidity, shown by monitions, leads us to the same conclusion as experimental lucidity—that human intelligence has methods of cognition different from those we habitually use.

It is possible that in some families there is a hereditary aptitude for lucidity: Dr. Ludwig[1] cites an interesting case of the kind—two sisters and two brothers who all four show unmistakable cryptesthesia.

M. Emile Laurent (*A. S. P.*, 1907, xvii, 161-176) has very properly emphasized certain general characteristics of monitions, especially that they seem to cease as soon as the monition has been understood. It seems that the mode selected by the manifesting power is just that which is most certain to arouse attention and least likely to pass unperceived. One is tempted to admit that among all possible forms of manifestations a kind of choice has been made of the one that could not have arisen from usual causes. M. Laurent concludes that there is intelligence at the back of monitions. This conclusion seems inevitable, but it does not follow that the intelligence producing the monition is not that of the percipient himself. Still, it must be admitted, provisionally at least, that monitions are in most cases selected, and well selected, whatever hypothesis we may adopt to account for them.

[1] *Telepathische Veranlagung* (*Psychische Studien*, xlvii, 1920, 456).

Let us add: (1) They are symbolical; (2) they impress the mind of the percipient so powerfully that all details are long remembered, and (3) that they do not cause the fear that might have been expected.

Space does not allow of mention of the legends that tell of monitory dreams in antiquity.

Sophocles, it seems, had such a dream: Hercules appeared to him and indicated where a golden crown that had been stolen would be found. Sophocles obtained the reward promised to the finder.

A celebrated monition to Swedenborg claimed the attention of Kant: Sir Oliver Lodge (*Survival of Man*) mentions this case: Mme. Martiville, widow of the Dutch ambassador in Stockholm, was summoned by a goldsmith to pay for a purchase made by her dead husband. Mme. Martiville, convinced that the money had already been paid, has the impulse to write to Swedenborg enquiring if by conversation with her deceased husband he could get at the truth of the matter. Three days later, Swedenborg went to Mme. Martiville, told her that the money had been paid, and that the receipt would be found in a certain drawer of a specified bureau in a certain room. The room, desk, and drawer were all correctly indicated.

From all these facts we conclude yet again: There are unknown vibrations in nature which set human intelligence in motion and reveal facts that the senses cannot convey.

If telepathy be admitted there is only one word to be changed in this sentence; we need merely say "vibrations of human thought" instead of "unknown vibrations." But to limit cryptesthesia to the perception of human thought-vibrations is to narrow its applications and change its entire nature.

6. *On the Frequency of Monitions*

Monitions are much more frequent than is commonly thought. When speaking to a sceptic on this point, he often replies, "I could tell you a very singular fact of this kind that happened to me personally": and this "singular fact" which seems to him evidential he will accept and recount with simple-minded satisfaction, while rejecting with infantile inconsequence other facts perhaps more evidential because they did not happen to himself.

I do not hesitate to say that some instances of telepathy, more or less evidential, could be gathered from nearly all families. If

they are not made public it is from a praiseworthy feeling they are not sufficiently evidential, or from fear of ridicule, but chiefly from reluctance to make the effort to confirm them by exact dates, official certificates, and other data without which a mere story has no great value. They seem nearly independent of age and sex; they occur in the daytime rather less frequently than at night on going to sleep or in dreams.

We may be confident that this psychological phenomenon is much more common than is supposed, and when a person who has received a monition is no longer branded as a visionary, instances will be multiplied. It is sheer idiocy to refer them to a colossal fraud repeated for fifty years in all lands, or to a series of gross illusions. It is equally unreasonable to think them due to chance; the mass of precise and unlikely details given precludes this supposition.

We are, then, in presence of a known but unexplained phenomenon: and is not this the character of most of the facts with which science is concerned? When a new case of monition is reported it is almost always possible to find analogous cases, just as a botanist can always refer a new plant to known species. This is characteristic of scientific knowledge. Experiment has given indubitable proofs of cryptesthesia. Observation has confirmed this proof by different but equally sure methods.

To show how interesting these monitions are, I have collected in the following pages a considerable number. They may be monotonous reading, but in a scientific work it is necessary to present a large number of duly attested facts. Their value appears by their quantity as well as by their quality. It is not possible, and it would be absurd to suppose, that *all* these facts authenticated by laborious cross-examination and investigation should be false or erroneous. Every unbiassed person who reads the evidence will acquire the certainty that neither lying nor exaggeration nor chance can account for *all* these monitions.

The facts are derived from various sources. The chief of these sources, the most abundant and the most strictly tested, is the investigation carried on by the Society of Psychical Research. The scientific and conscientious authors of *Phantasms of the Living,* Messrs. Gurney, Myers, and Podmore, have collected in that book the results of their observations. They were, with good reason, very exacting on the evidence, and have admitted, with few exceptions, only the accounts of the percipients them-

selves; and in cases of monitions of death they have taken the trouble to verify them by the certificates of death.

The investigation of the S. P. R. is a model of perseverance, courage, and scientific accuracy that other investigations can scarcely hope to rival. These enquiries are still in progress. Each number of the *Proceedings* contains data of extreme interest and no author can hope to produce even passable work without consulting these documents and those of the American S. P. R.

Another valuable, courageous, and scientific work was undertaken by Camille Flammarion through the *Annales politiques et littéraires,* the *Petit Marseillais,* and the *Revue des Revues.* He obtained 4,280 answers; 2,456 negative and 1,824 positive. Many imperfect answers had to be rejected, and out of the remaining 786, only about fifty deserve to be permanently retained, for, imitating the procedure of the S. P. R., it was resolved to eliminate nearly all that were not first-hand evidence. These are detailed in Flammarion's excellent book, *L'Inconnu et les Problèmes Psychiques* (Paris, 1900), which abounds in facts and details, though occasionally admitting some of doubtful authenticity.

The English enquiry elicited 5,705 answers, out of which there were 590 subjective hallucinations and 423 in which the hallucination would seem to have been exteriorized. But statistics of this kind are inconclusive, for most persons, if they have no interesting information to give, do not reply at all.

The little investigation that I conducted through the *Bulletin des Armées* during the war, brought me about a hundred replies, of which some thirty are worth preserving, and among these there are seven or eight of very great interest that I shall quote further on.

To the above must be added the facts indicated in special publications—the *Annales des Sciences Psychiques,* the *Psychische Studien, Light,* the *Religio-philosophical Journal, Luce e Ombra,* the *Banner of Light,* and others.

The aggregate is a weighty mass of documentary evidence. Considering each case separately, we find some imperfect and only vaguely demonstrative; but that is inseparable from all observational science. Observations can never give the same certitude as experiment, and to warrant any conclusion a very large number must be compared.

If, after carefully reading the instances here adduced, the reader cannot decide that monitions exist, i.e., that there is a rela-

tion, the working of which remains a mystery, between an external event and its cognition which neither our senses nor our reason can account for, if, I say, this conclusion is not accepted, then all observational and historical science must equally be rejected, and we must doubt the existence of aërolites or that Charlemagne ever lived. Monitions (sporadic lucidity) confirm experimental lucidity, and the latter corroborates the former.

II. ON CERTAIN MONITIONS (NOT COLLECTIVE) OTHER THAN MONITIONS OF DEATH

William James cites and analyzes a most telling example of cryptesthesia. A certain young girl, "Bertha," disappeared from Enfield (New Hampshire) October 31, 1898. The search for her was keen, more than a hundred persons explored the woods and the shores of the lake. She had been seen to go to the Shaker Bridge, but had not been seen beyond. A diver searched the lake, especially near the bridge, but found nothing. In the night between the 2d and 3d of November Mrs. Titus, at Lebanon, five miles from Enfield, dreamed that she saw the body in a certain place. The next morning she went to the Shaker Bridge, and indicated to the diver "within an inch" where the body should be found, head downwards and so that only the india-rubber sole of one of her shoes could be seen. The diver, following Mrs. Titus's directions, discovered the body, caught in the branches six yards under the water, which was very turbid. "I was much impressed," said the man; "corpses in the water do not frighten me, but I feared the woman on the bridge. How can a woman come five miles and tell me where the body was? It was in a deep hole head downwards, and in the dark I could hardly see it."

The Rev. Mr. Drake went one day to see a friend, Mr. Wilson, whose daughter Jessie had gone to India a short time previously, and said, "Your daughter has reached India today, June 5th." Mr. Wilson replied that that was impossible, the ship not being due till the 15th, at soonest.

"You disbelieve me?" said Mr. Drake. "Well, take your diary and note the date." Mr. Wilson then wrote in his diary, "Rev. J. Drake and Jessie, June 5, 1860." It has never been known how Mr. Drake could have had this dream or vision, or, as he used to say, this clairvoyance, that had made him so sure.

M. Bachelot, of Angers, receives from Sergeant Morin a little

ring of aluminum such as soldiers in the trenches used to make to beguile the hours. On the night of the 7th of March, M. Bachelot is awakened by a sharp pain in the ring-finger as if it were held in a vice. Half asleep, he drew off the ring and next morning thought he had lost it. He felt that something had happened to his friend Morin and spoke of his fears to three persons, Mr. G., Mr. S., and Mrs. S., who certify these details. On the following day he heard that Morin had been wounded (not severely) at 4 A.M. on the 8th of March (*Bulletin des Armées*). The story is curious but may have been a coincidence.

In the night of September 23d-24th, Mrs. K. writes to her mother: "What are you all three doing? I hope you are well, though I have dreamed these days that mother had broken her leg. Think of that!" Now on Saturday, September 23d, Mrs. K.'s little girl who was on a visit to her grandmother (Mrs. K.'s mother) had broken her arm. In the dream, among various disturbing incidents, Mrs. K. clearly distinguished her mother's house and felt that some accident had befallen one of her own people. This also is not very evidential, since there are two marked errors, the broken arm of the child instead of the broken leg of the mother.

Mrs. Claughton has given a good instance of lucidity, checked with great care by Myers. This interesting story must here be much abridged. It is even more remarkable as a premonition than as a monition.

Mrs. C. lived at No. 6 Blake Street, in a house that belonged to Mrs. Appleby. This house, it would seem, was haunted by Mrs. Appleby's mother, Mrs. Blackburn, who had died there. Mrs. C. had been there five days when she saw a form resembling Mrs. Blackburn. "If you doubt that it is myself," said the phantom, "here is the date of my marriage in India." The phantom then indicated to Mrs. C. that she should go to Maresby to see the tomb of Mr. George Howard, whose name, dates of marriage, and decease were given; that in the church register would be found the entry of the death of Robert Hart; that on arrival at Maresby Mrs. C. would not be asked for her railway ticket; that she would lodge at the house of a dark man, Mr. Wright; that the wife of this Mr. Wright had a child buried in the cemetery; and that there would be white roses on the graves. Everything fell out as predicted. It will be observed that Mrs. Claughton had never heard of Maresby nor of any of the persons mentioned.

Mr. Frederic Marks, at Newhaven, sleeping on his bed during the day, saw his brother, on a small sailing vessel about to founder in a storm. He saw his brother and another man in the boat, the one baling out water and the other trying to reef the sail. The vessel righted herself and seemed to come to shore. On the same day, 200 miles away on Oneida Lake, Charles Marks and a friend narrowly escaped drowning in a terrible storm on the lake.

Dr. Marcel Baudouin, whom I know to be a careful and scrupulous observer, had the rare opportunity of *observing* a case of monition. Being on a visit to Mrs. X., he sees her burst into tears during a casual conversation at half-past eleven in the morning. An hour later news is brought that her sister is seriously ill. She had been taken with a fatal attack of angina pectoris at the very moment that Mrs. X., in the presence of Dr. Baudouin, had this paroxysm of weeping, which was the more surprising as Mrs. X. very rarely gives way to tears. Dr. Baudouin certifies that he had never before or since seen her weep in this manner (*A. S. P.*, 1900, x, 129).

Captain M. was wounded August 27, 1914, by a bullet in the chest about 11.30 P.M., and left for dead. The same night at that same hour, his daughter, aged fifteen, who was sleeping soundly, woke up and told her mother, "Mother, father is wounded but is not killed."

Mr. Fryer hears his brother's voice call him "Rod" so clearly that he searches all over the house. Some days later his brother tells him that on leaving the train he had a bad fall at the same hour when the voice was heard and called "Rod."

Mrs. X., who is not mystical and has no tendency towards occultism, goes to sleep for a few moments during a journey by train, and sees a friend riding, putting his horse to clear a low wall, and having a fall which had no serious consequences. This was true, but could not have been foreseen by any ordinary means.

Mrs. West, travelling in Norway with her father and mother, dreams that she sees them in a sledge come into collision with another sledge going in the opposite direction. She sees her father causing the horse to rear. She wakes up, crying, "Father, father!" In the morning on her father's arrival she tells her dream, saying, "Then you are not hurt? I saw the horse rear, but I could not see if you were hurt or not." In fact, Mr. Cowes (Mrs. West's father) in descending a hill crossed another carriole,

and to avoid a collision made his horse rear so that it fell backwards. Mr. Cowes's son, who was following, was much disturbed and only reassured when he saw his father unhurt.

In the hospital at Munich, a soldier of the Aviation Corps under treatment for a pulmonary affection wakes up in the middle of the night and finds himself in the yard; he has been walking in his sleep and dreamed that he had flown to Schleisheim and there saw his friend N. on sentry duty who showed fear. A. then said in his dream, "Do you not know me?" to which N. replied, "Oh, it is you; what are you doing here?" Next morning A., convinced that there must be some reality at the back of his dream, writes an account of it to N., and at the same time (as proved by the post-mark), N. writes to say that being on sentry that night, he saw A. and said, "Is it you, Joseph?" adding that he heard his voice distinctly. The two letters crossed in the post.[1]

Miss May Lichfield, reading one night in her room, suddenly feels that some one has entered. She sees nobody, but feels a long and tender kiss on her forehead; and raising her head perceives her betrothed standing behind her chair, bending forward to kiss her again. The figure then disappeared, but she had been able to see his features, his tall stature, and broad shoulders quite distinctly. That day he had a fall from his horse, was insensible for some time and ill afterwards. At the time of the accident he thought, "My little May, let me not die without seeing you again."

Mrs. Paget goes down into her kitchen at 10 P.M. and suddenly sees her sailor brother coming towards her and about to sit down, the water shining on his oilskin and cap. She thought he had been wetted by rain and said, "Miles, where have you come from?" Then in his usual voice he said, "For the love of God do not say that I am here," and vanished. "I was very frightened," says Mrs. Paget, "and wrote down the date, without telling anyone." Three months later, Miles returned, and told his sister that he had been almost drowned in the harbour at Melbourne, having been taken out of the water insensible. The date was correct, but allowing for difference in longitude there was an interval of ten hours between the accident and the apparition.

Mme. A. Dudlay of the Comédie Française has reported various

[1] *Zwei deutsche Professoren gegen die Telepathie, par* S. Clericus, *Psychische Studien,* xliv, 1917, 350.

cases of monitions relating to the war, but the details are too few and not sufficiently precise (*A. S. P.*, 1919, xxix, 13-16).

Major Kobbe one day felt impelled to visit the cemetery of Greenwood, six miles from New York. Neither he nor any one of his family was in the habit of going there; but on reaching the place he found his father who had come for the disinterment of a member of the family. The letter sent by his father asking him to be present had not reached him. He arrived just at the right time.

A case of monition at a séance by Mme. d'Espérance is reported in *Light* (1905, p. 43) ; it is very complex, being accompanied by a materialization.

On April 3, 1890, Mme. d'Espérance wrote automatically, without knowing why, *"Svens Stromberg";* neither she nor anyone present knew the name. Two months later, at a séance at which Aksakoff and Boutleroff were present, it was said that Stromberg, a native of Jemtland, had died on March 13th at Wisconsin. At the same time there appeared (?) on a photograph (spiritist?) a face which Mme. d'Espérance's guide declared to be Stromberg's, and stated that he had not died on the 13th, but on the 31st of March. After long and laborious enquiry it was found that a certain Svens Ersson, born in Jemtland, had emigrated to Canada and had died on the night of March 31st. The photograph was identified, and it was proved that the news of his death could not have reached Gothenburg, even by telegraph from New Stockholm, the town in Canada where he died, at the time that the name was given at the séance.

Bozzano considers this case one of the best substantiated, but this seems an exaggerated view.

The following case is specially interesting, for it presents the very rare feature of several successive apparitions expressing a single monition:

Miss Minnie Wilson, aged 17, educated in a Catholic convent in Belgium, when about to kneel at her prayers, saw her Uncle Oldham coming towards her. She was extremely surprised. Her uncle asked her to pray for him as he had shot himself by reason of a disappointment in love. The next day, and the day following, the vision was repeated; she felt the touch of his hand, but did not hear his step nor hear the bench creak. He disappeared, not suddenly, but by becoming slowly indistinct. She learned later

that he had killed himself with a pistol-shot for a love-trouble (*A. S. P.*, 1908, xvii, 266).

Monitions sometimes come as formal warnings. Hyslop (*Am. S. P. R.*, 1907, 487) has authenticated the curious story of Mr. McCready, editor of the *Daily Telegraph*, who had a very strong impression one Sunday while at the church of St. John (N. B.), of a voice saying to him, "Go back to the office." The order was so peremptory that he ran from the church to the office, arriving to the great astonishment of his sub-editors. He there found a petroleum lamp blazing in his room and throwing out such clouds of smoke that everything was covered with soot.

With reference to this and other similar monitions Bozzano discusses whether such occurrences involve the intervention of an external intelligence.

Mme. Tonelli, at San Marino, when trying to sleep one night, saw her son thrown down by a passing carriage and much injured. She rose, went nearly four miles along the road to Costa di Borgo, and found her son at the foot of a declivity down which he had rolled. Thus, despite the darkness and the storm and notwithstanding her age, and without having any normal reason for disquiet, she got up in the middle of the night to go to his assistance (*A. S. P.*, 1905, v, 170).

Mr. Searle, a lawyer, saw in his rooms at the Temple, as clearly as in a mirror, the figure of his wife; her head thrown back and her face pale as death. At that same hour, in consequence of a great fright, Mrs. Searle had fainted. She had never fainted before.

At Syracuse (N. Y.) Mr. Lee suddenly woke up from sleep, having seen his father fall downstairs with a great noise. His father was bishop at Iowa. He got up, waked his wife, asking her if she had heard any noise, and noted the time by his watch, 2.45. At that hour Bishop Lee at Iowa fell on the stairs and died soon after.

Mr. Hunter Watt dreamt that a cast of the Venus de Milo, relegated to a corner of his garden, had fallen, the head being broken off by the fall; which was found to be true (Myers, *Human Personality*, i, 379).

Mrs. Severn woke at 7 A.M. feeling a sharp blow on her mouth as if her upper lip had been cut and was bleeding. Putting her handkerchief to her mouth she was surprised to find no blood. At the same moment her husband who had gone for a sail on the

lake was caught by a gust of wind causing the handle of the rudder to strike him on the mouth, cutting his lip and causing much loss of blood (Chevreul, *loc. cit.*, 53).

Mrs. Swithinbank saw her young son, aged ten, standing on a high wall facing her window. She jumped up to ask him why he had left school. The boy looked at her with fear in his eyes and vanished. Search was made without result. A few minutes later one of his classmates brought him in a cab in a fainting condition. It seems that in class he fell back insensible, saying, "Mother will know."

Mrs. Richardson, in India, dreams that her husband, 150 miles distant at the siege of Multan (1848), has been severely wounded and she hears his voice saying, "Take the ring from my finger and send it to my wife." About the same time (9 P.M.) the general fell severely wounded and said those precise words to Major Lloyd. General Richardson recovered from his wound.

M. Gignon, military commissary at Aurignac, was playing a game at cards with friends at a café. Suddenly he got up much disturbed and wrote to his wife, "I have heard an anguished cry. Oh, tell me what you want! Is there trouble? Is there danger?" At that hour, 9 P.M., December 22, 1878, M. Gignon's little granddaughter had been severely scalded by a bottle of over-hot water placed in the cradle.

Mrs. R. writes in her diary on March 15th, "Last night, March, 1874." She had seen the head and shoulders of a man in a cloudy form close to her. She cried out, "It is Captain W." The captain, who was a friend of hers, was then in New Zealand, and had promised that if he were to die he would appear to her. The time of the vision agreed *exactly* with a carriage accident which injured Captain W. so severely that he remained a long time insensible and made but a slow recovery (*Tel. Halluc.*, p. 184).

Mr. Phibbs, at Ilfracombe, dreamt between 10 and 10.30 P.M. that he saw his dog *Fox* stretched out, hurt and dying, at the foot of a wall. He told his wife of this. At that time his dog had been worried by two bulldogs and fell dying at the foot of a wall (*A. S. P.*, 1905, xv, 428).

M. J. P. was walking and reading, in the daytime, and suddenly saw a comrade (Louis) falling backwards with his hand on his heart with the usual gesture of a wounded soldier. He told this vision to his family. Some days later he learned that Louis, having accidentally wounded his brother when out shooting, had

fainted with emotion, saying, "If Charles dies I shall kill myself" (Flammarion, 155).

M. Martial Lagrange dreams that he has a cancer of the stomach and is operated on by Dr. Guinard. The same night, Dr. Guinard (a hospital surgeon) could not sleep on account of severe toothache and passed the night working at a treatise on the surgical treatment of cancer of the stomach. He naturally thought of visiting M. Lagrange, who was not, however, his usual dentist. As soon as he entered M. Lagrange's consulting-room, the latter said to him, "I dreamt of you last night; I had cancer of the stomach and you were going to operate on me" (*A. S. P.*, 1893, iii, 140).

Mr. Haggard had a very painful dream, feeling suffocated as if drowning. Gradually the dream took more definite form. "I saw," he says, "my dear old dog *Bob* stretched out among the reeds of a pond. *Bob* was trying to call me, but failing to reach me by his voice, sent me the idea that he was about to die." In the morning he thought little of the matter, *Bob* having been quite well the day before; but the dog did not reappear, and some days after it was found that he had been struck by a passing train and that the shock had thrown him into a pond close by. The accident took place on the night of the dream (*A. S. P.*, 1905, xv, 424).

Count Nicholas Gomanys, a medical officer in the Greek Army, was sent to the garrison of Zante. As he drew near to the island he heard a voice saying in Italian, "Go and see Volterra." He says, "This phrase was repeated so often that I turned dizzy and was alarmed, thinking it an auditory hallucination. There was nothing to make me think of Volterra who lived in Zante, whom I had not seen for ten years, and to whom I had never spoken. At the hotel, while unpacking my bag, the voice continued to harass me. Just then they sent to tell me that M. Volterra had come. He begged me to go with him at once to see his son who had been taken very ill" (*A. S. P.*, 1905, xv, 424).

Commandant Grima went with his wife to a conversazione at the Sorbonne and Châtelet, on the 14th of July, 1915, in Paris. On returning to St. Denis, Mme. Grima perceived that she had lost a diamond while in Paris. Next morning her young son said, "I dreamt last night that a little girl had found the ring and brought it to you. Did you lose it, mother?" The children had been asleep when their parents came home. That, however, is

not the strange part of the story, for possibly the children when half asleep had heard their parents speaking of the lost ring. Three months later, by a great chance, a girl of twelve belonging to a good family in Paris found the ring by the steps of the Sorbonne. This is an extraordinary premonition (*A. S. P.*, 1895, xv, 434).

Mrs. Bagot, at table d'hôte (Mentone) sees her little dog *Judy* that she had left in England crossing the room. Without thinking she exclaimed, "What! *Judy* here!" She told this to her husband, her two daughters, and her mother, and there were jokes on Judy's ghost. She also noted the fact in her diary. It was ascertained that there was no dog in the hotel. At the same time (there is some doubt about the date) the dog had died suddenly in England (Bozzano, *A. S. P.*, 1909, xix, 322).

Mr. G., of Boston, sees the living image of his dead sister, and notices a scratch on her right cheek. He speaks of this to his mother who nearly fainted on hearing it, for it seems that Mr. G.'s mother, preparing her daughter's body for burial, had made a scratch on the face, and no one but herself knew of the accident (*A. S. P.*, 1909, xix, 322).

Mr. G. Parent, mayor of Wiege, dreams that the farm at Chevennes is on fire; he makes futile efforts to run there, and sees the farm burnt down. Awaking, shaken and trembling, he tells the dream to his wife. Next day a part of the farm was destroyed by fire.

The next story (from the unpublished enquiry through the *Bulletin des Armées*) is so evidential that I give *in extenso* the letter received from Captain V., January 14, 1917:

"On September 3, 1916, during the attack on the Chemin-Creux, between Maulpas and Cléry, Second Lieutenant D., of the 13th battalion of the Alpine chasseurs, was wounded by a bullet in both arms, and left the line to have his wounds dressed. That evening and for fifteen days he was missing at roll-call, and was sought in vain in the dressing-stations. On September 18th the 13th battalion returned to the same sector, the front line having been advanced three kilometres. During the night of September 18th-19th Second Lieutenant V., an intimate friend of D.'s, saw in a dream his friend D. dying in a shell-hole at the edge of the Chemin-Creux, under a willow tree, reproaching him vehemently for letting his best friend die unassisted.

"V., a cool-headed and sceptical officer, was nevertheless obsessed by his dream, and went to his commandant, S., who

at first did not take the matter seriously, but in the end, in kindness, and to finish with the affair, gave V. a short leave to search the place. V. came to the Chemin-Creux and there found the surroundings as seen in his dream. At the foot of a willow was a stick with the label, 'Here lie two French soldiers.' There was nothing to connect this with D., but on opening the grave, D.'s body was found, which had been buried about fifteen days before. This strange fact could be attested by the officers of the 13th, but they have other things to do."

Dr. Ollivier, at Huelgoat (Finistère) went on horseback at 8 P.M. on a dark night to visit a patient in the country, and was thrown from his horse, breaking his collar-bone. At nine o'clock, his wife on retiring to rest was seized with violent trembling, called the servant, and said, "My husband has met with an accident and is killed or hurt." It may have been a monition, but chance coincidence is possible, or even likely, in this case.

A soldier, a peasant of La Creuse, told M. Raymond Mialaret, in very simple words, that one morning his little girl of seven had seen him in a dream lying on the ground bleeding from the left arm. She told the dream to her mother, who said it was a nightmare. That same night the soldier was wounded in the left arm (Enquiry through the *Bull. des Armées*).

Mr. Fraser Harris, who had gone from London to lecture at St. Andrews, went on Sunday to a small family hotel, and suddenly saw the front of his house in London. His wife was on the doorstep speaking to a workman who was holding a large broom. She seemed troubled, and Mr. Harris made out that this poor man was asking for help. At that very time Mrs. Harris was speaking to a poor man seeking work, who offered to sweep the snow from the steps and said he had nothing for himself or his children to eat. On returning to London, Mr. Harris found the man just as he had seen him in vision (Chevreul, 45).

Lieutenant G., at the front near Reims, had not heard from his wife for three days. One night he dreamed that he saw her pale as death on her bed. He woke up sobbing and waited impatiently for news. Three days later he learned that on the night of his dream she had a narrow escape from suffocation by fire in her room, which scorched all the bedding. Mme. G. felt the result of the semi-suffocation for a long while (Enquiry through the *Bull. des Armées*).

A little girl of ten, in a dream, sees her father, Lieutenant D., coming home on leave from the front, and added that he had a rubber cape, which no one knew of his having. Next day the lieutenant arrived, a month before he was expected, wearing a waterproof that he had bought on his way home (Enquiry through the *Bull. des Armées*).

Professor S. Venturi, in charge of the lunatic asylum at Garofalo, left home for Pozzuoli, but under a strong presentiment, determined, in spite of difficulties, to return to his house at Nocera. He found his wife in great agitation. Their little girl had a dangerous attack of croup, and Mme. Venturi had cried out for her husband in her distress (Tamburini, *A. S. P.*, 1893, iii, 292).

M. Keulemans, a well-known artist of bird-life, narrates some interesting instances of cryptesthesia. Without exactly going into trance, he visualizes very clearly the head or eyes of a bird when drawing. But the cases of telæsthesia quoted by M. Keulemans are not precise enough to carry conviction, though interesting by their symbolical form (*A. S. P.*, 1893, xii, 217).

In closing the foregoing very incomplete record of monitions not followed by a death, I may be permitted to mention one personal to myself. It is not a case of cryptesthesia, for the dates do not correspond and there was no recognition; but the psychological phenomena resemble those accompanying lucid monitions too closely to omit them here.

I was in Italy during the second month of the war, where I felt the duty of carrying on an active propaganda for our holy national cause from the beginning of the war. I was living on the first floor of the Quirinal Hotel; it was almost deserted and I was, I believe, the only guest on that floor. On the night of September 22-23, 1914, I was awakened from sound sleep by three knocks, very clear but not very loud, on the door of my room. I sat up in bed and switched on the light. Again the three knocks were heard. I called out, "Come in." Then, behind the door but seemingly close to me, I heard a woman's voice speaking low and plaintively, "Doctor, doctor," drawling the last syllable. Then thoroughly awake, I said aloud, "Very well, I am coming." My answer was almost automatic; for my first passing thought was that someone wanted medical help. But nothing followed. I opened the door (but of that I am not quite sure), and seeing no one, I scribbled down the exact time, 1.20 A.M. (for I had just

thought it might be an hallucination) and being in no way alarmed, was able in about half an hour to go to sleep again, though my five sons were then at the front exposed to the gravest dangers. As the voice had been a woman's, and my daughter-in-law was expecting her confinement, I thought it might be a monition of that event. I even wrote down this in my note-book.

It was not any such monition, and it cannot be referred to any specific event. Six days before, on the afternoon of the 17th of September, my son Jacques had been seriously wounded and taken prisoner, though the news had not then reached me.

By this experience I became aware of the character of an auditory monition. (It matters little from the psychological point of view whether it were lucid or not.) If I can judge from my own case, it is as clear as any phenomenon of normal life. When I first woke up, being between waking and sleeping, there was some uncertainty; but in a few seconds the exteriorization was precise, and it is to be remarked that all the details were firmly fixed in my mind. They doubtless may have become slightly twisted, but the general facts remain unchangeable.

It is absolutely impossible to prove that this was a monition of the wounding and capture of my son; nevertheless, I am convinced (without asking anyone to share my conviction) that the monition was real. The analogy with innumerable observed cases is close. It is the only hallucinatory monition that I have ever received. I have, however, in the course of my life had two flashes of cryptesthesia, one when awake, the other in dream.

One winter evening in 1899 I was working in my library in the Rue de l'Université. My wife was at the opera that evening with my daughter Louise. Suddenly, about 10.30, I thought for the first time in my life, and without there being any smoke at all in the room to suggest the idea, that there was a fire at the opera. The impression was so strong that I wrote down "Fire! Fire!" and a few minutes later, thinking this not enough, I wrote "Att," meaning "attention." Not much disturbed I returned to my work. Towards midnight, when my wife and daughter returned, I at once asked them, to their great surprise, "Was there a fire?" My wife answered, "No, there was no conflagration, but we were much frightened. Between the acts some smoke rose from the orchestra; there was a rumour of fire; I left the box quickly to learn what was the matter, telling my daughter, 'When I come back leave at once without waiting for anything.' They reassured me and the performance went on without incident."

This is not all. At the moment when I wrote "Fire" in my notes, my sister, Mme. Ch. Buloz, whose room opens off mine, fancied that mine was on fire. She went to the door, but feeling that her fears were groundless, stopped, saying to herself, "No, I will not disturb my brother for such a silly fancy."

Therefore my sister and I had an impression of fire at the same moment; that is how I can best describe the vague notion that came to me while my wife and daughter were at the opera nearly a mile distant at which a real danger from fire arose. Is this a coincidence? Was there at my house an odour of smoke too faint to be consciously perceived?

Now for the dream: About 8 A.M. in 1907 I was still asleep and was dreaming that I was with Mme. Charcot. (Why Mme. Charcot, to whom I have never spoken and whom I do not know?) We were in a motor-car driving in an avenue of plane-trees. The car was going so fast that I feared an accident: the accident happened and I woke.

The accident was simply that the postman had brought a registered letter, and in taking this letter I fancied (though I have no idea why) that there was some connection between my dream and the letter. To signify this, and by way of memorandum, I made a little cross on the receipt. The letter came from the Azores, and was from my friend, Colonel Chaves, asking for an introduction to Jean Charcot, whom I did not know, who was due to reach the Azores a few weeks later in his yacht.

I think that these three personal cases were not mere coincidences but were due to cryptesthesia; but I think so only because there are many other more evidential cases. In themselves these cases prove nothing, but they reinforce the large number of proofs collected by more favoured observers.[1]

III. MONITIONS OF DEATH

Monitions of death often occur. I give a large number of instances because I hope to carry conviction to the mind of the reader by their variety and complexity, and especially by the very great number of the witnesses.

[1]It has been necessary to abridge greatly the records of monitions and premonitions given above. This is to be regretted, for to appreciate their full force ample details are necessary; the skeleton of facts does not carry the weight of conviction given by circumstantial details. I sincerely hope that those persons who are interested in these perplexing problems will not remain content with these brief summaries, but will refer to the original documents.

Monitions of death do not differ essentially from other monitions, but deserve separate mention because of their frequency. The cases reproduced here might have been much more numerous had I not exercised a somewhat severe criticism. This criticism might have been still more rigid, and I willingly admit that half of the cases cited have not any absolute evidential value; but even allowing for this, there remain a notable number of authentic and indisputable facts that defy sceptical analysis.

If only from a historic point of view, it is interesting to cite the very clear monition received by the eminent chemist, Chevreul.

It was in 1814, a little before the entry of the Allies into Paris. In his room, between the two windows of his study, he saw a pale white stationary form like an elongated cone surmounted by a sphere. Shuddering slightly, he turned away his eyes and ceased to see the phantom. Looking back at the same place, he saw it again; and this he did three times. He then decided to withdraw into his bedroom; and to do this had to pass in front of the phantom, which vanished.

The vision was probably not recognized, but at the same moment at a distance from Paris an old friend of his was dying, who bequeathed his library to him. Chevreul adds, "If I had been superstitious I might have thought the apparition real."

Chevreul also narrates the story of a well-known anatomist of the eighteenth century, who said to the barber who was attending him, "Why do you grasp my arm?" The barber was amazed at the question. At that very instant one of Chevreul's friends had drowned himself. The scientist was so struck with the occurrence that he never afterwards would enter the room alone.

Brierre de Boismont, in his book on hallucinations, tells the story of a young girl who in a dream saw her dying mother, heard her call, and described the whole scene in the death-chamber. The details were correct, and her mother was dying at the time. He adds, "If we were to cite all the names of persons of sound judgment and extended knowledge, high in the ranks of science, who have had such warnings, they would furnish much matter for thought."

This book has been written for precisely that reason. There is much matter for thought.

Mme. Juliette Adam, the distinguished writer, was in her room nursing her child at 10 P.M. Roused by the child's crying, she saw her grandmother at the foot of her bed. She said, "Dear

granny, I am so glad to see you"; but the shade did not reply, and raised a hand to her eyes. "I saw," says Mme. Adam, "two empty sockets. I jumped out of bed and ran towards her, but as I was about to clasp her in my arms, the phantom vanished." The grandmother had died about two hours previously (Flammarion, p. 187).

Mrs. Allom, being then a young girl of seventeen, was at school in Alsace. One day, when reading in the sitting-room, she saw her mother dressed in her night-gown, lying down as if in bed; she was smiling and raised one arm, pointing upwards. The apparition moved slowly across the room, and rising higher, disappeared. Two days later the mistress called the girl to the study, who said, "You can tell me nothing, I know that my mother has died." Mrs. Carrick, her mother, had in fact died on that day and at the same hour.

Alexis Arbonsoff, of Pskoff (Russia) dreamed in bed one morning that his mother came, embraced him, and said, "Adieu, I am dying." He woke, shuddering, and looked at the time, 7.30. Ten minutes later the whole house was aroused. His mother had risen at 7 o'clock, had gone to kiss her little granddaughter, and then as she said her prayers before the icons, she had died suddenly at 7.30 (Flammarion, 435).

Mme. Van B., at Ypres, waked up with a start at 4.45 A.M., feeling that her father was ill or dying. She awoke her husband, who tried to calm her, thinking it a nightmare. Her father died at the same hour (*A. S. P.*, 1899, ix, 71).

The Rev. Mr. Ball of Cambridge dreamt that he was with his friend Dombrain in beautiful country. A bright light appeared before him; he woke up, and saw his friend Dombrain smiling in the beam of light. Mr. Ball rose at once, calling "Robert, Robert," and the vision disappeared. It so happened that a young house servant was named Robert, thought he was called, and came. Mr. Ball then realized as clearly as if he had been at the bedside that his friend Dombrain had died. He noted the time—three minutes past five. At that very moment Robert Dombrain died.

The following fact, narrated by M. Pyrrhus Bessi (*Revue des Etudes Psychiques,* 1901, 21-23; 97-168), is a case of monition of death by accidental crystal vision. M. Bessi, at Panicola (in Italy, near Perusia), working alone in his room one night, broke off to rest for a moment. His lamp nearly went out, he tried to re-light

it, and it went out completely. Nevertheless, the room was filled with a dim light; and in an old mirror he saw, as if through an opening in the wall, another room differently furnished, and in it an old lady whom he recognized, sitting at a table. She took some paper from a drawer and began to write slowly, put the paper in an envelope, rested her head on the back of the chair, and went to sleep. Next day M. Bessi learned that this lady had died in the night; her will, written in her own hand, was found in the drawer of the table.

The next account has just been given to me by an eminent member of the Paris bar, whom I will call A., as I have no right to give his name. The fact is of ancient date, since it concerns his grandmother.

Mme. A., who had been early widowed, had one evening been too eagerly courted by a near relation, B., and had been somewhat offended. Some months later, in the winter, being in the country nursing a sick child, she found the room very cold on a particular night, and not wishing to call up the servant, went herself to the wood-store to get some logs. On opening the door of the wood-store she saw B. before her. He knelt down, took her hands, and said, "Forgive me." She was speechless with astonishment, the vision being as clear as fact; but in a few moments it vanished. Next morning a telegram arrived announcing B.'s death.

The Rev. Mr. Barker, being in bed at 11 P.M., before going to sleep perceived the smiling face of an aunt then in Madeira. He shuddered and told the vision to his wife and to several other persons. The aunt had died at the same hour, allowing for difference of longitude.[1]

Mr. Baeschly, of Saverne, aged twenty, was alone with his father in the house, when towards midnight they were awakened by great noises. They got up, but could find no cause. They returned to bed and the noises recommenced; they then found the front door opened. This occurred a third time, and they then fastened the door with rope. Some time later they received a letter from America announcing the death of M. Baeschly's brother. It appears that shortly before death, on awaking from a

[1]This case is referred to by Grasset as proving nothing; but this criticism is baseless: he speaks of a commonplace dream "such as had probably occurred to Mr. Barker some hundreds or thousands of times." But this is assuredly not the case; the hallucination is so clear that he tells it to his wife and his friends as a singular thing, perhaps unique in his life. Does the coincidence of time count for nothing?

long coma, he had said, "I have made a long journey, I have been to my brother at Brunatte" (Chevreul, 334).

Miss Beale, then aged fourteen, sees a man in a loose dressing-gown in her room in the middle of the night. He seemed to be feeling his way, and vanished. Miss B., much frightened, called to another girl sleeping in the same room. The latter said, "It is doubtless my brother C." The next morning at breakfast C. declared that he had not entered the room, but that he also had seen a form enter his room whom he knew as that of a friend (in poor health, but not thought to be in danger) who had agreed with him that the first to die should appear to the other. He had died that same night (*A. S. P.*, 1891, i, 13).

M. Beaugrand, a journalist of Havre, known to me personally, told me and produced documents confirming his story, that his mother at Havre on the 2d of November, 1856, before going to bed, heard what seemed a terrible storm and saw the chimney shaken as if by a high wind. There was no storm nor wind, but the same day at 11 P.M. her husband perished in a cyclone some miles from New York on his passage to Havre. This old story would not by itself be very evidential, for memories become twisted out of shape as time goes on; but it is probable that these old cases, so closely parallel with recent ones, are correct in the main. Many good instances, too long to be reproduced here, will be found in C. Flammarion's paper, *"Les apparitions au moment de la mort"* (*Revue Spirite,* February, 1921, 33).

Elsa Barker, the author of sundry novels (*The Son of Mary Bethel,* etc.), being in Paris at the time, was suddenly moved to write automatically, "I am here, I can see you; I found myself before the inevitable," etc. The signature was X., a person whom she hardly knew, an American author and magistrate aged about seventy. She asked her friends for details of X., whom she had only seen at distant intervals, and learned that he had died a few days before the message had come to her. She thinks that she was the first person in Europe to learn the news. This writing was followed by numerous others, published as *Letters from a Living Dead Man* (Rider, 1917). The book has but slight scientific interest, but should be read carefully as showing the powers of the subconscious in a distinguished writer.

On May 4th Lord Beresford, steaming between Gibraltar and Marseilles, saw a coffin containing his father in his cabin as distinctly as if it were real. He spoke of it to his shipmates and on

arriving at Marseilles learned that his father had died April 29th and was buried on May 4th (*A. S. P.*, 1907, xvii, 727).

M. Berget, professor of physics at the Sorbonne, narrates that his mother when a young girl suddenly heard the voice of a friend living far from Paris, and fainted with fear. On recovering she said, "How horrible! Amelia is dead; I heard her sing as only the dead can." Amelia died at that time, 3 P.M., at Strasburg, in the convent of which she was a member (Flammarion, 78).

The Rev. P. Beck, of Southbank, Yorkshire, felt an inexplicable sadness one evening after dinner. At ten minutes to eight exactly he saw a form descending the stairs. His wife who was with him saw nothing. The apparition agreed in height and dress with Mr. Beck's mother, but Mr. Beck did not recognize it. Mrs. Beck died some hundred miles away at the same hour (*A. S. P.*, 1891, i, 367).

M. Belbeder, of the Sixth Colonial Regiment, went on leave to some friends at Riberac in the Dordogne. When going to sleep he saw a white transparent shade move from the chimney-piece, come towards him, and bend over the bed. He says, "I fully understood that she said, 'Always remain my son's friend.' The form slowly rose and I recognized the mother of one of my best friends whom I had left in good health. I got up, lest I should be under an illusion; the night was very dark and there was no moon." The person whose shape was recognized had died some two hours before (Enquiry through the *Bulletin des Armées*).

M. Binet, aged fifteen, was unable to sleep. About 12.30 he seemed to see a ray of moonlight, and this luminous shadow took the form of a person and moved towards his bed. He cried out, "Léontine!" He spoke of this apparition before knowing that Léontine had died at that very hour (Flammarion, 84).

The following monition is not more remarkable than others; but I give it because I was to some extent a witness of certain details (October, 1919). It takes the usual form of such monitions.

In the night of October 22-23, 1919, Adèle Bureau, a widow, forty-one years of age, in the service of my daughter-in-law, Mme. Albert Richet, at Carqueiranne (Var), heard in sleep, at about 3 A.M., a knock at her door. She tried to say "Come in," but seemed paralyzed, "as if her night-dress were glued to the bed," so that she could say or do nothing. Then she saw the form of a woman dressed in white standing on the threshold as if the door were open. She could not distinguish the face, for the shape

turned its back and vanished as she looked. It disappeared as if through the door, which, however, had neither been opened nor shut. Adèle went to sleep again, though with difficulty. She did not recognize the shape, but thought of a niece whom she loved, who was seriously ill. On the next day, and after relating "the nightmare," as she called it, to my daughter-in-law, she received a telegram announcing the death of her niece.

Adèle told me that she did not recognize her niece, not having seen the face, but had thought of her. The costume was like a white bridal dress, and she thought that her niece (only a year married) must have been so buried. The emotion caused was so strong that Adèle was quite ill with tears and headache.[1]

The next instance is not, strictly speaking, a monition of death, but presents a remarkable monitory character (*Jour. S. P. R.*, July, 1919). Father Brompton (a pseudonym) was due to go next day to administer the last sacraments to a sick woman. He gave his telephone number to the nurse in case the patient were worse. At dawn he was awaked and saw a human form, which said, "There is a telephone message for you." It was 4.15 A.M. He dressed hurriedly and arrived just in time to administer the sacraments. It was proved that the telephone had not been used and that no one had called him.

Should we consider this a visual and auditory hallucination of Father Brompton, preoccupied with his duty to the dying woman? Given the many authentic monitions that are known, it is legitimate to suppose that this was a true monition involving lucidity, and not a morbid non-veridical hallucination such as occurs to alcoholics and insanes.

Mrs. Bishop, travelling in the Rocky Mountains, made the acquaintance of a creole known as Mountain Jim. He said to her, "I will see you again when I die." Mrs. Bishop states, "In 1874, ten years later, being at Interlaken, at about 6 A.M., I was sitting up in bed, writing, when I saw Mountain Jim before me. His eyes were fixed on me, and when I looked up he said, very low but very clearly, 'I am come as I promised,' made a sign

[1]The telegram was "Mme. Bureau, Carqueiranne, October 23d, Chissey en Morvan (Saone et Loire. Jeanne, deceased this morning, funeral Friday eleven. Berthelon.") Adèle had never before seen any apparition. Some years ago, after the death of one of her aunts, she had nightmares in which she thought herself pursued and suffocated by this aunt. She had masses said and the dreams ceased. Adèle Bureau is intelligent and responsible. The dead girl was not interred in her bridal dress.

with his hand, and said, 'Adieu.' Mrs. Ker, who was with me in the hotel, and I both took a note of the date and hour. The news of the death reached us later, and the time, allowing for difference of longitude, agreed with that of the apparition."

The certificate of death of Mountain Jim shows that he died at Fort Collins (Colorado) on September 7, 1874, at 3 P.M., which corresponds to 10 A.M. at Interlaken. Mrs. Bishop does not say whether the vision was on the 7th or the 8th of September; if the former the vision preceded death by four hours; if the latter, twenty hours elapsed between the two events.

Mme. Stella, then aged seventeen, sees a young and somewhat intimate friend of hers coming into her room. She writes: "The door opens and I see him come in. I get up to push an armchair for him near the fire for it was snowing, and he seemed cold, having no cloak. I began to scold him for coming without one. Instead of answering, he placed his hand on his breast and then on his head. I was still speaking when Dr. G. entered and asked to whom I was speaking. I said, 'Here is this tiresome boy come out without a cloak, and he with such a cold that he can't speak. Lend him your cloak and send him home.' I shall never forget the horror and stupefaction of the doctor; for Bertie had died about twenty minutes before. I had heard the handle turned and the door opened. The figure walked in the room and sat down while I lit the candles. The apparition lasted nearly five minutes" (*A. S. P.*, 1892, ii, 173).

The Rev. Mr. Field, in New Zealand, while asleep, hears himself called, "Harry, Harry," and clearly recognized his mother's voice. She usually called him Henry, not Harry. It was the 28th of November, 1873. At the same time, given the difference of longitude, his mother died in London, saying "Harry, Harry" (*A. S. P.*, 1892, ii, 175).

The following account is by a celebrated painter, A. Besnard. It is at third-hand, and therefore must be accepted with great reserve. On the 13th of July, 1842, Mme. B., ill and dying, woke with a start and cried, "What a misfortune, the Duke of Orléans is dead." When Dr. Vidal came to see the dying woman he said, "Have you heard the news? The Duke of Orléans has been killed at Neuilly in a carriage accident." M. Brémon said, "I knew, she told us."[1]

[1]Letter from A. Besnard to Jules Bois, *L'Au-Delà et les forces inconnues*, Paris, 1903, 127.

Mme. Bloch, at Rome, was dressing at 7 A.M. when she saw her nephew, René Kraemer, who said to her, "Yes, I am dead." Much frightened, she went to call her son, who tried to reassure her. René Kraemer, aged fourteen, had died of acute peritonitis the same morning; death setting in at 7 A.M. and the end coming at noon (Flammarion, *L'Inconnu et les Problèmes Psychiques,* 70).

Mme. Boniface, a schoolmistress at Etampes, when a child of seven at Niort, dreamt that she was in a dark room where there was a coffin, that she rushed out, and in the next room felt a hand on her shoulder. She recognized her father, whom she had not seen for two years, who said to her, "Do not be afraid, little one, kiss me." Her father had died at Paris that evening (Flammarion, 407).

Lord Brougham tells in his memoirs (*Life and Times of Lord Brougham,* 1871, 201-203) that being at Gothenburg in Sweden, in 1799, he was taking a bath and saw on the chair where he had put his clothes an intimate friend, G., who had gone to India and to whom he had not written for years, looking at him calmly. It was the 19th of December, on which date G. had died.

Dr. Rowland Bowstear, running after a ball at cricket, suddenly sees his brother-in-law by the hedge, in shooting clothes with his gun on his arm. A friend with him saw nothing, though Dr. B. pointed out the apparition, which disappeared. It was 1.10 P.M. The day and hour coincided with the sudden death of his brother-in-law, who was out shooting and was carrying his gun.

Dr. Bock went with his brother to a music-hall in Munich. They were enjoying the entertainment, when between the acts he heard a loud knock, and saw the figure of his mother stretched corpse-like on the bed with a cross in her hands. Sure that his mother had died, he left the hall, despite the protest of his brother, who did not understand his fear, knowing that their mother seemed well. But Dr. Bock said, "My mother is dead, I could swear it." He made arrangements for a substitute at his duties, ordered his mourning, and next day received a telegram announcing that she had died at the hour of the vision (*A. S. P.,* July, 1913, 195).

Emma Burger, lady's maid to the Countess of Ussel, was sleeping on the night of August 15-16, in the room opening off that of her mistress, the door being open. Suddenly she saw clearly her fiancé, Charles B., standing at the half-opened door into the

passage. "He was in travelling dress and I saw his features and the details of his clothes quite clearly. He smiled but said nothing. I said, 'Oh, go away.' Madame, who was in the next room, heard me, and said, 'Emma, what is the matter? Are you dreaming?' I then said in a low voice to Charles, 'Oh, do go away.' He disappeared, not suddenly but slowly, as if closing the door and leaving. Next day I asked if anyone had been sent to my room."[1] On the 18th Emma received news that Charles had died of heart seizure on the night of the 15th-16th of August (*Phantasms of the Living,* ii, 1886, 696).

M. Basserole, a schoolmaster in Brittany, received a letter summoning him to his sick father. At the station of Redon at 4.40 P.M. he fainted, and when he came to himself, before seeing anyone in the waiting-room, he saw the figure of his father, which disappeared at once. Mr. Basserole died at 6 P.M. (Flammarion, 128).

M. Jacques C., at Grenoble, had gone to bed, when he saw the door of his room open nearly noiselessly, and a girl, Martha, to whom he had been engaged, entered. She was dressed in white, her hair down on her shoulders. M. C. is sure he was not sleeping. She came to the bedside and bent over him. C. took her hand. It was quite cold. He cried out and the phantom vanished, and C. found that he had a glass of water in his hand. Martha had died at Toulouse at the same hour (Flammarion, 164).

Miss Bibby, aged nineteen, woke up with the feeling of someone in her room. She saw the figure of her grandfather, whom she recognized. He called to her, "Miss Nellie, ma'am," as he was accustomed to do in jest. She spoke of the apparition next day. Some time after she heard that he had died at that moment.

M. Bertrand, aged nineteen, dreamt that a cousin, a sub-lieutenant in the infantry at Tonquin, was surrounded by enemies, defending himself. He vanished in a cloud. He told the dream to his mother and sister and thought no more of it. Three weeks later they heard of the cousin's death on April 30, 1888, at Yon Luong, on the date of the dream (Enquiry through the *Bulletin des Armées*).

On the night of July 13-14, 1916, Sergeant Jean Jules Bigard of the 124th Regiment of infantry, while on leave, dreamt that

[1]Emma Burger was in my service for fifteen years, and her good faith is not to be doubted. (Ch. Richet.)

he had lost both legs in action and that the registrar's clerk gave the death-certificate to his parents. He laughed at the grisly tale and told his dream to his father and mother, who thought nothing of it. A short time later he learned that his uncle, also named Jean Jules Bigard, had been killed at Biache, both legs having been blown off by a shell (Enquiry through the *Bulletin des Armées*).

Mr. Beresford Christman heard the following rather startling story told by his uncle, J., to his father, G. The two brothers, J. and G., were in their cabin on the way to St. Thomas. The night was calm and the moon bright, almost like daylight. They were awaked. (By what?) Both then saw for a short time (that seemed long to them), the figure of their father, which they recognized. The form raised a hand and showed the sons that its eyes were shut. They noted the facts in the log-book. It seems that the vision coincided to a minute with the death of the father of J. and G. Christman (*Phantasms of the Living*, ii, 17).

A very interesting fact was related to Sir Oliver Lodge by Lieutenant Larkin of the Flying Corps (*Jour. S. P. R.*, July, 1919, 76). On the 17th of December, 1918, Lieutenant D. M. Connell came to Lieutenant Larkin's room and said that he had to take an aëroplane to Tadcaster, but would be back at tea-time. About three hours later, Larkin being in his room sitting at the fireside, the door opened and Connell appeared, saying gaily, "Hello, boy!" Larkin turned, saw Connell in aviator's dress, and said, "Back already?" Connell replied, "It is all right, I made a good trip." He shut the door and was gone; it was then 3.30. Larkin went to the mess-room and was surprised not to see Connell. During the evening they learned that Connell had crashed near Tadcaster at 3.25. It cannot be supposed that Larkin had spoken to some other officer, mistaking him for his friend Connell; the room was small and well lit.

Mr. Vicary Boyle at Simla saw in a dream his father-in-law, who lived at Brighton, stretched pale on the bed tended by his wife. The vision soon disappeared. Mr. Boyle went on sleeping, but on waking was firmly persuaded that his father-in-law had died, though he was unaware of any illness and had not been thinking of him. Mr. Boyle's father-in-law had died nine hours before the dream (Myers, *Human Personality*, i, 138).

Mrs. Collyer, of New Jersey, on January 3, 1856, feeling poorly, went to bed early. She sat down on her bed and saw her brother

Joseph standing near the door. She said, "He looked at me gravely and sadly, his head was bandaged and he was wearing a white garment, like a surplice, but very soiled." At that very moment there had been a collision between two vessels on the Mississippi 1,080 miles away. Mrs. Collyer's brother Joseph, who commanded the steamboat *Alice,* was killed by the fall of the mainmast on his head. He was in his nightgown, having gone to sleep in his cabin before the accident (*Telepathic Hallucinations,* Fr. Tr., 117).

Mme. Couesnon, of Jassy, when half asleep, sees a friend of hers, A., sitting on his bed in night attire, saying, "Oh! I am in pain." It was then 2 A.M. That night A. died at 2.20 in the Tyrol (Flammarion, 419).

In 1913 P. Cotte, a student of horticulture at Villepreux, was in bed and just going to sleep when he saw a dim form leaning on the cross-rail of his bed. As it became clearer he recognized his foster-brother, A., aged thirty-five and a long sufferer from an incurable malady. He recognized the voice, which said, "How are you, Pierre? Adieu. I am going." C. then sat up in bed and called to his friend but the form had disappeared. The apparition coincided exactly with the time of death (Enquiry through the *Bulletin des Armées*).

Lieutenant R. Martin, being convalescent, was anxious about his best friend from whom he had not heard for eight days. He says: "I had a dream; my friend appeared to me. He seemed in a hurry and said, 'Why don't you come with me? Are you dotty?' I was struck by the new decoration he was wearing. I told this dream to two friends next morning. I afterwards learned that my friend had been killed by a shell at Verdun at 5 P.M. some hours before my dream. I am a mathematical student at the Sorbonne; I never believed a word about occult sciences" (Enquiry through the *Bulletin des Armées*).

M. Conil, then a child of eleven, saw in a dream his dying uncle, and heard his words as if he were in the room. The uncle died at 2 A.M., just when young Conil woke up. He says, "I heard his words distinctly and could repeat them, for the vision made such an impression on me that it seems like yesterday." All was exactly as seen and heard (Flammarion, 454).

Mrs. Cox relates the following: "On the 21st of August, 1869, about 9 P.M., I was in my bedroom when my little nephew, aged seven, ran in and said, 'Oh, aunt, I have just seen my

father walk round my bed.' He was so frightened that he would not go back to his room and I had to take him into my bed. Towards midnight, I was not asleep, and saw my brother, who was at Hongkong, quite clearly near the chimney-piece and mortally pale. I was so frightened that I hid under the bed-clothes. A little later I heard his voice call me by name three times. When I looked up he had gone. I noted down the facts." Mrs. Cox's brother died suddenly the same day at Hongkong of sunstroke (*Telepathic Hallucinations,* 372).

The wife of Colonel Craigie, in India, at 10 P.M., was about to undress when her daughter, who was with her, said, "Oh, mother, there is Mr. B.! Yes, don't you see him? He is saying, 'Good-bye, sissy, good-bye.' Now he is going. He is gone." The house was searched, Mr. B. was not there; he had killed himself the same day at 8 P.M. (*Phantasms of the Living,* ii, 581).

On the 13th of November, 1914, at Fez, Lieutenant C. of the Foreign Legion woke up, sobbing, and said to his comrade, M., sleeping in the same room, "I have had a horrible dream; some disaster has befallen one of my brothers, I don't know which, but I am sure." M. wrote this to his colonel, from whom I have this account: Commandant C., the brother of Lieutenant C., was killed in action at Elhenni (Morocco) on the same day, probably a few hours before the dream.

Mrs. H. D. dreamt that she saw a friend of hers, Maria, playing chess with Dr. D., but wearing a thick black veil. Mrs. D. said, "You will lose if you keep on that veil." Maria answered, "It is because I am dead. Look!" She raised her veil and Mrs. D. saw a death's-head with empty eye-sockets. In the morning she received a telegram, "Come quickly. Maria has died in the night." Maria was apparently in perfect health (Flammarion, 430).

Mr. D., a barrister in whom Mrs. Sidgwick has full confidence, had thirty years ago a friend, X. Y., whom he often saw. He says, "I knew he might die suddenly, but he seemed in his usual health. On the 7th I was in his room a long time chatting on various matters. He was in good spirits, and I went home at bedtime. On the morning of the 8th I woke, distressed. Day had dawned and in my dream I saw X. Y. lying on the floor, his knees drawn up, his hands thrown back and his jaw fallen. I woke my wife, saying, 'I have seen X. Y. dead on the floor.' She replied, 'Oh, you are dreaming.' I went to sleep again. But

at eleven o'clock, X. Y. not having come to the office, and his housekeeper having had no answer to her knock on his door, I got a ladder to enter by the window. X. Y. was dead on the floor exactly as I had seen him in my dream. From that day to this I have been certain that it was no dream. I was not unconscious from the moment I opened my eyes and saw the apparition. I had an indescribable feeling of distress, just as one might on waking startled and seeing a terrible sight. This happened thirty-three years ago and every detail is as clear in my memory as if it were yesterday."

Another, Mr. D., dreamt that he saw one of his work-people, R. Mackenzie, who said, "I have not done what I am accused of; I am innocent, you will soon know." The dream was hardly ended when Mrs. D. came into her husband's room to tell him that a tragedy had taken place, Mr. Mackenzie had committed suicide. "No," said her husband, "he has just told me that he is innocent." Mackenzie, in fact, had swallowed aqua-fortis in mistake for whisky (*A. S. P.*, 1909, xix, 324).

Mme. Deupes, at Nice, in the middle of the night, heard distinctly a voice calling her by name, "Marie, Marie." She got up and awoke her husband, who was sleeping in the next room, asking if he had called her. On his denial she went to sleep again. Once more the voice called her, and she said to her husband, "I am frightened; light the candle." She passed the rest of the night with her husband. She said to him, "Remember, we shall hear of the death of M. Gautier at Marseilles, I think I recognized the tone of his voice."

M. Gautier had died at the time that Mme. Deupes heard him (Flammarion, 132).

The Abbé Dontaz, priest of Domdidier, near Fribourg, Switzerland, then a young man of eighteen, dreamt twice running that he saw his sister dying. His father appeared to him, saying, "Your sister Josephine is dying; but your mother does not know." Next morning on going to college he received a letter from his father containing the same words (Flammarion, 132).

A most remarkable monition is given (Flammarion, *La Mort et son Mystère,* p. 172). To understand it fully the original must be referred to. On Saturday, January 3d, Mr. Dickinson, a Newcastle photographer, received, at 8 A.M., a visit from a Mr. Thompson, whose portrait he had taken. He referred to his book for the name and address, and said to Mr. Thompson, "If

you will call again in a few days you shall have the proofs." Mr. Thompson then left. The assistant, on being spoken to, was surprised, Mr. Thompson's father having called the previous day to press for the proofs.

It was proved (1) that on January 3d Mr. Thompson was seriously ill of typhoid fever and likely to die during the day; (2) that in his delirium he continually spoke of the photographs and that was why his father had enquired; and (3) that the person seen by Mr. Dickinson could only be Mr. Thompson's double (*A. S. P.*, ii, 310). This mysterious case is very well supported by proofs that define it as an objective phenomenon.

Mr. Charles Demay, a professor at Dijon, saw one of his colleagues, G., at Paris on July 10th, who made an urgent request that Mr. Demay could not consent to. G., despairing, left him at 11.30 P.M., near the St. Louis bridge. In the night of the 12th-13th July, Mr. Demay being at Soulancourt, 210 miles from Paris, dreamt that he was in a boat on the Seine at the St. Louis bridge, and that he was trailing his hand in the water; that it was bitten by a fish; on raising his hand the fish's head became that of G. Mr. Demay woke up and looked at the time, 2.20 A.M. He told the dream to G.'s sister, and a few days later learned that G. had thrown himself into the river on the night of July 12th-13th and had been taken from the water at 2.30 A.M. (Boirac, *A. S. P.*, xxii, 1912, 178). This is a striking case of symbolical cryptesthesia.

Justinus Kerner relates that Angelica Hauffe had a waking vision of a coffin and pall on three successive days preceding the death of her father whom she did not know to be ill, but with whom she connected the vision (*Seeress of Prévorst, tr. fr.*, p. 61).

Kerner also relates the story of a Mr. Hubschmann, of Stuttgart. One morning at dawn his children woke him, saying, "Grandfather has come." This was not the case, but a few days later his brother wrote from Strasburg expressing much anxiety about their father, as he thought he had seen and recognized him on the same day as the children thought they had seen their grandfather at Stuttgart. Mr. Hubschmann senior had died in Bothnia on the same day as the apparitions at Stuttgart and at Strasburg.

Mrs. Duck, at 10 A.M., picking up sticks in a wood, saw her husband, David Duck, and called to him, "Oh, David, what brings

you here?" She went home and evinced no surprise when told that he had been run over by a carriage and killed. She said, "I knew it; there was no need to tell me. I saw his ghost" (*Tel. Halluc.*, 257).

The sister-in-law of Mr. Dyne, of London, saw during the day of December 16, 1875, a dead man, with open eyes, lying on a narrow bed. The room was bare, without carpet or furniture. She thought of Mr. X., who had done her some kindnesses, and had gone abroad about a year previously. On the same day, ten hours earlier, Mr. X. had died in a little village hospital, in a room exactly as seen by Mrs. Dyne (*Tel. Halluc.*, 84).

M. E., a sub-lieutenant of engineers, returning from leave, while driving from the train to meet the regimental train, saw clearly a grave and cross bearing the words, "X., adjudant in the —— company of engineers, killed on the field of honour, June 14, 1917." This was unlikely, for X., the senior section commander, being thirty-seven years of age and father of a family, had been given a post of less danger than others. He had been killed June 7, 1917 (Enquiry through the *Bulletin des Armées*).

Mme. Galichon, at Paris, dreamt on the night of November 8-9, 1916, that her grandson, a cadet in the Sixth Battalion of the Chasseurs Alpins, entered her drawing-room like a whirlwind and went out again as quickly. The impression being very clear, she told her servant of the dream. She soon received the official notification that her grandson had been killed by a shell at St. Pierre-vast on the evening of November 8th (Enquiry through the *Bulletin des Armées*).

Mme. Escourru, looking at the portrait of her son, an officer of Zouaves, then in Mexico, saw one of the eyes injured and the face streaming with blood. The portrait seemed as if alive, one eye being gouged out. It was probably about 1 P.M., being after lunch. On the same day, Palm Sunday, March 29, 1863, Captain Escourru had been struck by a bullet in the left eye, at 5 P.M. This gives a difference of six hours, for 1 P.M. at Paris corresponds to 7 A.M. in Mexico. This case has been investigated with great care by Dr. Dariex, who visited M. and Mme. Escourru several times (*A. S. P.*, 1891, 152).

C. Flammarion, in the *Revue Spirite*, lxiv. 2d of January, 1921, reports a remarkably similar case, the authenticity of which seems to me weak, for no documents are available and the date is wrong, March 17th for the assault of La Puebla which took

place on March 29th. The story is, that in 1863, the Baroness de Boislève received many guests to dinner, among others General Fleury and President Devienne. Suddenly on entering the drawing-room, Mme. de Boislève saw her son standing before her with his left eye bleeding. Her son was a lieutenant of hussars in Mexico. She fell on the floor in a faint. Eight days later she learned that her son had been killed in the assault on La Puebla by a bullet in the left eye.

The similarity in the two cases is so great that I suspect that the story refers to one and the same person, though Flammarion adds: "Dr. Nélaton gave a written account (*procès-verbal*) of the event in the handwriting of President Devienne, and countersigned by all the guests." It would be necessary that this document should be produced before we could be sure that this is not a version of the Escourru case.

This case shows how necessary it is to demand documents, and to check every statement. The S. P. R. is perfectly right to insist on proofs and attestations; there are never too many, nor even enough.

Mrs. Eustance, on her death-bed, spoke insistently of a father-in-law whom she called "Uncle Done." While she was dying, Mr. Done, who knew her to be very ill, heard a voice calling him, "Uncle, uncle"; and at the same time his young niece, who lived with him, heard herself called, "Rosie, Rosie." She left her room in the middle of the night, thinking that her uncle had called her, and met her uncle who also thought that he had been called (*Tel. Halluc.*, 345).

Mr. Everitt was suddenly awaked in the middle of the night. He heard a noise in the room but could see nothing. Then his mother's voice spoke softly, saying "Tommy" three times, and added "Your mother has died." Mr. Everitt told this before hearing of his mother's death, which took place at the time.

Archdeacon Farber, awaking in the night, saw a friend sitting at the foot of his bed, dripping with water. The apparition shook its head without speaking. It returned twice that night. Soon after the news came that a short time before the apparition to Mr. Farber, his friend had been drowned while bathing (*Tel. Halluc.*, 130).

Mme. Ulric de Fonvielle, the wife of the author of that name, had been a few minutes in bed, but was still awake when she saw the bed-curtain drawn aside, and a friend of her childhood

with whom she had had a quarrel three years before appeared to her as clearly as in life, wearing a dressing-gown, and with her dark hair down on her shoulders. She looked fixedly at Mme. de Fonvielle, held out a hand, saying, "I am going. Can you forgive me?" Mme. de Fonvielle held out her hand but the vision disappeared. The clock struck twelve. Next morning while she was telling the story a telegram was received at La Haye, "Marie died last night at 11.45" (Flammarion, 80).

The following fact is reported by my friend, Gaston Fournier, who has several times shown me strong mediumistic powers. It is possible that his presence conduced to the result.

Dining with his friends M. and Mme. B., Gaston was surprised that a mutual friend, d'E., had not appeared as expected. The dinner went off merrily. Gaston and his hosts were to go to the theatre together; and madame went to her room to put on her hat. She gave a cry of fear; and said that standing before the mirror she had seen d'E. at the door reflected in the glass. He appeared pale and sad, and was wearing his hat. Mme. B., without turning round, said, "Oh, d'E., so you have come at last; sit down." As he did not reply, she turned round, and seeing nothing, cried out in fear. She insisted on knowing what had become of him. They went to his house; he had not gone out. No one answering the bell, they forced the door and found him dead by a pistol-shot. He had probably shot himself about 10 A.M. (*A. S. P.*, 1921, i, 22).

M. Louis Noell, a chemist at Cette, states that when he was a student at Montpellier, on the night of November 23-24, he saw about 4 A.M., while half asleep, his sister, pale, bleeding, and inanimate, and heard her plaintive call, "Louis, my Louis, come to me!" He was oppressed by the vision and told his comrades. In the evening his elder sister came in deep mourning, and told him that their sister Helena had died of acute diphtheria at Perpignan, November 23d, at 4 A.M. Telegrams had been sent him which he had not received. (It may be supposed, though it is unlikely, that Louis Noell had an access of somnambulism during the night, and had then read the telegrams which the servant had placed in a drawer.)

My friend, Manuel Tolosa Latour, a very distinguished physician of Madrid, when a child was awakened in the middle of the night by his mother weeping and saying to him, "Pray for your grandfather, who is dead." She had waked with a start, having

seen her father dead, in a dream. The news was true; M. Tolosa Latour states that event preceded the dream by a few hours (*A. S. P.*, 1891, i, 35).

Mrs. G., having gone to bed early but not yet asleep, saw by the light of a night-lamp the figure of Major G. pass across the end of the room. He wore his usual dress. She says, "It was neither a dream nor delirium nor fevered imagination"; the time was a little before 11 P.M. The major had died at 10.45; Mrs. G. knew him to be very ill, but had no close acquaintance with him and was not thinking of him (*Tel. Halluc.*, 140).

Lady G., who had left her mother in good health, woke in the middle of the night and said to her husband, "My mother is ill; have the horses put to for me to go to her." When nearing her mother's house she met her sister's carriage. She also having been disquieted, had come. They arrived in time for the last moments of their mother who had been taken suddenly ill (Chevreul, *On ne meurt pas*, 40). Perhaps the two daughters on the last occasion that they had seen their mother had subconsciously observed some signs of impending illness.

Mrs. Gay, at Saint-Jean-de-Luz, had two monitory dreams, interesting as showing a gradual transformation from one personality to another. The first dream was of a Mr. X., about eighteen months dead. Little by little the lineaments changed to those of her father. The change took place several times in the course of the dream. In the morning a letter arrived intimating the death of her father.

On the 24th of March Mrs. Gay saw her father, then dead, accompanied by a Mr. L., whom Mrs. Gay knew very slightly. This dream made a profound impression on her, and she concluded that Mr. L. must have died. He had not died; but some days later she received a letter from him telling her that her brother, Captain Edmund, had died.

On April 5th, when they were still without news of Captain Edmund, and very anxious, Mrs. Gay's little girl, aged one year and four months, said that she had seen Uncle Edmund *in her bye-bye*, with a red stain on his head. Mr. L.'s letter reached her a few hours later, telling her that her brother, a captain in the artillery, had been killed by a fragment of shell that had struck him on the head March 23d.

Mr. Goodall woke up with the impression that he had said aloud, "I have lost my dear little May." Another voice that he

did not recognize, said, "No, not May, but your youngest boy." A short time later this was confirmed (*Human Personality,* ii, 213).

Miss Gollin, on January 25, 1896, at 12.30, working at the office of the *Evening Post* (New York) felt that there was some one behind her chair. She turned and saw her fiancée dressed in black. The vision disappeared after a short time. She asked a companion, "Miss Burrows, did you see anyone behind my chair?" Miss Burrows saw no one. The young man died at that hour. He had been ill some days but Miss Gollin thought him only slightly indisposed (*J. S. P. R.,* May, 1908, 234). The testimony of Miss Burrows shows that the vision was entirely subjective.

Mrs. Green, in England, dreamt that she saw two women in a small carriage, that the horse fell into the water, and that both women were drowned. She did not recognize either, but saw the hats floating on the water. This case has been already described (p. 254). At the same hour both women, one of whom was a niece of Mrs. Green's, were drowned in Australia. The horse was drowned also. The bodies were located by the hats floating in the water. Mrs. Green had never seen her niece and therefore could not recognize her (*A. S. P.,* i, 49). The abundance of detail makes this one of the most telling monitory dreams on record.

General Fitch, in Burma, on getting up one morning, saw a friend whom he thought far away enter his room in broad daylight, and then vanish. No one in the house had seen him enter or leave. He learned that his friend had died suddenly about the same time, six hundred miles away (*A. S. P.,* 1891, i, 362).

Marian Griffiths left the family breakfast table one Sunday morning, went into the garden, and without ostensible reason looked long into a fountain there. Her sister came to look for her, and she said, "Something terrible has happened; oh, my poor dear H." Her brother H. was drowned while bathing in a shallow river. There was no reason that Marian should be anxious about him (*A. S. P.,* 1891, i, 364).

Colonel H., in London, woke at dawn and saw in his room his brother officer, Major Poole, in khaki uniform and wearing a thick black beard, as Colonel H. had never seen him. The apparition was so clear that H. thought it real; he saw all the details of the uniform. He spoke and P. replied, "I am shot," raising a

hand to his breast. "The general sent me forward." Colonel H. told the facts to some comrades, and the following morning came the news of the action in the Transvaal at which Major Poole had been killed by a shot through the right lung. The time coincided with the vision.

Mr. Marius S. Griffin, in Jamaica, saw in a dream an old lady for whom he had a great affection, dressed in white. The dream ended in a vision very sharply defined at the foot of his bed. He remarks, however, that the night being very dark he could not have seen a living person there. He noted the dream in his diary, and learned that his friend had died at the time he saw the apparition. She had said, shortly before her death, "Tell Marius that I thought of him" (*Tel. Halluc.*, 160).

General H., in his tent at Bombay, saw his sister in night-attire at two o'clock in the afternoon. He wrote at once for news of her, and learned that she had died at the hour of the apparition. He says, "I am as sure of the fact as of my own existence" (*Tel. Halluc.*, 246).

Mr. H., who was then at school in Geneva, relates that one morning one of his schoolfellows said aloud, before several persons, that he had seen the brother of one of the masters (that master being then absent from the school for a few days) stretched on the grass with a dark hole in his forehead. The dream made a great impression on the boys. On the next day they heard that Mr. X. had been killed by his gun going off as he was crossing a ditch, the charge entering his head. Mr. H. cannot state identity of time between the dream and the accident.

Suzanne H., an old servant of Mrs. A., married and went to live at a farm a long way from the town where Mrs. A. lived. One night she waked up and said to her husband, "Listen! Mrs. A. is calling me." The husband heard nothing and Suzanne was reassured; but Mrs. A. had been taken with sudden illness and died at the hour when Suzanne had heard her voice (Flammarion, *L'Inconnu*, 140).

Clovis Hugues, a distinguished poet, was imprisoned at Marseilles after the events of the Commune. His friend, Gaston Crémieux, condemned to death, was with him, and said, "When they shoot me I will come and prove to you the immortality of the soul by manifesting in your cell." "At dawn of day on November 30, 1871," says Clovis Hugues, "I was awakened by sharp little knocks on my table. The noise ceased and I went to sleep again.

A few moments later they began again. I jumped out of bed, and broad awake stood at the table. The knocks continued; this was repeated once or twice. At that moment Crémieux had just been shot" (*L'Inconnu,* 76).

M. Martin Halle, of Cette, dreamed that he saw a girl fall from a window. He told this "horrible dream" to his family. In the morning the cabman who usually came to fetch him failed to come, and another came in his stead, very late. That morning at 5 A.M. the daughter of the cabman had fallen from a window and been killed (*L'Inconnu,* 460).

Mme. Hers, entering her room at 2.30 P.M., saw her mother on the bed in a frilled cap, dead. She sobbed and nearly fainted. A few minutes later a telegram was brought her from Strasburg telling her that her mother was very ill. She said, "She is dead, I have seen her." The elder lady had died at 3.30, Strasburg time. She had a frilled cap (*L'Inconnu,* 104).

The celebrated medium, D. D. Home, who gave the finest examples known of ectoplasmic forms, showed occasional lucidity. He states that at the exact time of the death of Allan Kardec, one of the first promulgators of the spiritist doctrine, he received the communication, "I regret having taught the spiritist doctrine, Allan Kardec." The message was received in the presence of Lord Dunraven (*Lights and Shadows of Spiritualism,* by D. D. Home). All the same, it would be interesting to know the precise conditions under which this message was transmitted.

M. Octave Houdaille was called to Mirecourt (Vosges) by the serious illness of his grandfather, left Paris with his brother George at 10 P.M., and went to sleep in the train. At 1 A.M. he awoke suddenly, hearing a deep sigh. He got up and called his brother, saying, "It is 1 o'clock, grandfather must be dead or dying. I have just heard his last sigh." In fact the death took place at 1.30 A.M. (*A. S. P.,* 1891, 99).

Mrs. Hosmer, the sculptress, at Rome, waked at the moment that the clock struck three and saw inside her bed-curtains the form of a young Italian woman, Rosa, who had been her servant and whom she knew to be slightly ill. It seemed to her that Rosa said, "Adesso son felice, son contenta." Next morning she told her dream while at breakfast with Miss Lydia Child, who did not believe it. They sent, however, to get news of Rosa and found that she had died at 5 A.M. (*Tel. Halluc.,* 146).

Mr. Hutchins died suddenly at Cardiff, forty-eight miles from

the house where his wife was living. His son left in a carriage to take her the sad news. She met him at the door, saying, "Daniel, your father is dead." "How do you know that?" he asked. "He called me," she replied, "about 9 o'clock, and disappeared immediately, I have not slept since; he called me by name, 'Mary, Mary'" (*Tel. Halluc.*, 297).

Dr. Jean, at Cogolin (Var), was called to attend a little boy aged about seven, delirious with fever. At 10 A.M. the child woke up, terrified, seeing water everywhere and crying, "Help," and saying that his father was drowning. In fact his father, going to Nice, was drowned at that same hour (Enquiry through the *Bulletin des Armées*).

Two employees at the same office, J. and F., were close friends. One day, F., having an attack of indigestion, did not go to the office, the doctor having ordered a few days' rest. In the evening J., on returning home, and sitting with his wife, saw distinctly his friend F., dressed as usual and with a stick in his hand, looking at him fixedly. The words of Job came to his mind, "A spirit passed before my face and the hair of my flesh stood up." He asked his wife the time. "Twelve minutes to nine," she replied. "Then it is at 8.48 that F. has died; I have just seen him." In fact F. died by the rupture of an aneurism between 8.35 and 9 P.M. (*A. S. P.*, 1891, i, 301). This monition is one of the most remarkable by reason of the exactness of the details and unforeseeable nature of the event.

Mr. Jukes heard in a dream one of his comrades say to him, "Your father, Mark, and Harriet have both gone." He waked and his feeling was so strong that he wrote down the words. He was so moved that he did not go down to breakfast in the morning. At that time his father was dying of cholera in America, and his sister-in-law, Harriet, died two days later (*Tel. Halluc.*, 126).

Mr. Grant woke up in the night feeling a presence in his room, but seeing nothing. He had the conviction that the father of his friend Bruce had died. He looked at the time—12.14 A.M. In the morning he spoke of it to several persons, and in the evening noted in his diary that he had so spoken. It was not Mr. Bruce's father, but his own brother, who had died in China some hours before (*Tel. Halluc.*, 93).

Mrs. L., at Farnborough, at 3 P.M., saw an old gentleman, dressed in a former fashion and carrying a cane, come into her room. In spite of the rain his clothes were not wet. She recog-

nized her uncle and spoke to him as if he were a real person; but he, without answering, went out by the half-open door. The servants when questioned said they had seen no one. At that very time her old uncle, whom she did not know to be ill, died in Leicestershire (*Tel. Halluc.,* 93).

Captain Lagarrue, at St. Louis (Senegal), was going to sleep when he felt a strong pressure on his chest. He raised himself on his elbow, rubbed his eyes, and saw his grandmother looking at him with dim eyes. He heard her say in a weak voice, "I come to bid you good-bye, dear boy, you will see me no more." He then said aloud, "Come, this is not a dream," and got up. The apparation had lasted some seconds only. The time agrees with that of the death of the captain's grandmother. She was of an advanced age, but her health gave no reason for disquiet (*L'Inconnu,* 182).

Jules Lermina reports the following case, not very evidential, told him by a person whom he knows well (*A. S. P.,* 1895, 202).

"I had gone to fetch a dish from the kitchen, when I heard the voice of one of my cousins at the window. I raised my eyes and saw him nodding to me, and saying 'Good morning, Louie.' I answered, 'Good morning, Wenand,' and went to open the door to him. My father, surprised that the door should be opened when no one had rung, came to see. When I told him that I had seen Wenand, he said, 'That is impossible,' and told me that Wenand was dead, but that he, my father, had not wished to tell me before."

In despite of Mr. Carrington's authority I cannot place much reliance on the story he tells of Mrs. H., who would seem to be a woman of the working class. She saw her son, who was at the front, at her door, and was surprised not to see him that evening. She left the door open but he did not return. The next day he again appeared and was not seen again that day. On the next day he came for the third time. This time she said, "Now do not leave me, my son, sit down and take tea with me." Her son went up to the room, his mother following. He threw himself on the bed and disappeared, leaving the bed covered with blood. The first apparition coincided with the day of death. This story is so highly improbable from a psychological point of view that it cannot be accepted. At the very least some documentary evidence of Mrs. H.'s state of mind is required.

In March, 1890, Countess Kapnist, on leaving the theatre with her sister, and being about to enter her carriage, stopped, seeing

a diaphanous figure with indistinct outlines. The vision lasted a moment only, nevertheless the smallest details were distinguishable—a large nose, hair parted at the side, blond beard somewhat scanty, no hat, and a brown overcoat. The sister of the countess saw nothing, though the latter had said to her, "Did you see nothing in front of you?" Some time later Countess Kapnist learned that a certain Mr. P., answering to the description, had died after a long illness, two days after the vision. Mr. P. had, in March, 1889, promised I. K., Countess Kapnist's sister, to appear before her, but not so as to frighten her (*Human Personality,* ii, 49).

Dr. Liébeault reports the case of Mrs. B., of New Orleans, who when magnetized by him soon gave proofs of lucidity by automatic writing. One morning she felt an impulse to write. The message purported to come from a certain Marguerite, who announced her death while at school in Coblentz. The death was verified as having taken place the same day (*Phant. of the Living,* i, 293).

One of my colleagues, a distinguished physician, in no way credulous, writes to me that one night he dreamed of a young friend of his, Mme. L., in tears and wearing a mourning veil. Next morning he told his dream and expressed his surprise that the young lady, who was usually gay and light-hearted, should have appeared in mourning. "Towards 8 A.M. my sister telephoned to us that her sister-in-law, Mme. L., had lost her husband after an operation for peritonitis. He adds that he had not seen M. and Mme. L. for a fortnight, and that his sister (their only relation in common), did not know that M. L. was ill. This monition is interesting as being symbolical. The image of the dead man himself was not presented; it was *an information,* and this is important as regards theory, for it seems to prove that so-called apparitions are not phantoms of the dead, but only monitions.

Mrs. Frances Lightfoot was awakened by a loud noise. It seemed to her that her door, which was locked, was violently opened and that someone or something entered her room. A figure appeared, lying over her bed, and an imperious voice said, "Frances, I want you. Come with me at once." She then thought of Mrs. Reed, a dear friend in India, and imagined she must be dead. She noted down the dream in her diary. Next day she told her sister that Mrs. Reed was dead. The vision took place eight to nine hours after Mrs. Reed's death (*Tel. Halluc.,* 154).

At Holywood, Mrs. Kerr dreamed that one of her sons, a locomotive driver, had fallen from his engine, had his head and leg crushed against the parapet of a bridge, and that the train had passed over his body. The time was about 10.50 P.M. A few minutes earlier, at Paisley, Edward Kerr had fallen from his tender at a bridge, his head and leg were crushed, and he died the following day.

This case was gone into by Sir James Crichton Browne and Dr. Clarke, in the *Am. S. P. R.* (November, 1905, 145); and though the incident dates back ten years, the details are so precise, and Mrs. Kerr's good faith so evident, that it is difficult to dispute its authenticity.

Mme. de Langenest one morning at eight o'clock saw her uncle, M. Bonnamy, whom she thought to be in good health, standing before her in her room. She went to the other side of her bed and the phantom moved to the place where she had been standing. She went to find her husband on the ground floor, and again the phantom moved in front of her. She said, "Uncle, why have you come? Have you died?" The apparition vanished. Soon after there was a ring at the door, and Mrs. L. said to the servant, "Go and get the telegram, my uncle is dead." He had died at 1.15 that night (*A. S. P.*, 1900, x, 65).

Mrs. Macklin saw on March 27-28, 1918, in a very vivid dream, her son David, a lieutenant of infantry, in the uniform of a private, which much surprised her. He was wearing a helmet, and she said, "Oh, David, why are you no longer an officer, why this Tommy's uniform?" She told her dream to two persons who witness to it. On April 3d she received the news of her son's death on the night of March 27-28. His body was not found: in night-attacks the officers often wore the uniform of private soldiers (*J. S. P. R.*, January, 1919, 3-7).

Mr. Marchant, of Redhill, saw someone come into his room at 2 A.M. The name of Robinson Kesley came to his mind, though he had seen him but once in twenty years, and never thought of him. He knew him by his long, tangled hair. The apparition looked at himself in the mirror; and as soon as Mr. Marchant spoke he slowly sank into the floor. Mr. Marchant told his dream to several persons, before he learned that Kesley had died at 2 A.M. the same night (*Tel. Halluc.*, 12).

Moritz quotes the story of a woman who had received a letter from her husband telling her that all was well; nevertheless she

dreamed that night that she saw him dying with a large wound in his side, with an officer beside him. This was true. Four months later she saw an officer at church and recognized him as the one who had been with her husband in his last moments (quoted by J. C. Passavant from *Unters, über den Lebensmagnetismus,* 2d edit., Frankfurt, 1837, 132).

These old stories are probably true in the main, for they agree well with more recent ones; but taken by themselves, they do not carry conviction, for in those days the same care was not taken as now in attestation and scrutiny.

Dr. Weir Mitchell states a case that he had from his father, the doctor of a lunatic asylum. The wife of one of the patients had died, and the doctor went to tell the husband, who said, "You need not tell me; my wife has died. I know it; she came to me last night and spoke to me." On enquiry Dr. Mitchell found that the patient had been speaking aloud during the night. The warder came to silence him, and was rebuked by the patient for driving away the wife who had come to see him and tell him of her death (Hyslop, *Science and a Future Life,* 51).

In James Hyslop's book many interesting examples will be found; these are worthy of mention, both because he has chosen cases in which the intelligence and good faith of the percipients are above reproach, and because his acute and clear-sighted criticism deserves to be taken as conclusive.

Mr. Andrew Lang states in his article on *Apparitions* in the Encyclopædia Britannica (10th Ed.) that he saw an eminent member of an English university at the moment that this person was dying one hundred miles away(?) (N. B. This does not appear in the article as given in the eleventh edition.—TRANSL.).

M. Keulemans, the artist, heard when half awake in Paris one morning the voice of his son Isidore, and saw him smile, both seeming more real than in an ordinary dream. During the day he again heard the voice, and told his wife that the child must have died. The child had really died in London at the hour of the apparition.

James Cotter Morrison and Professor Estlin Carpenter give parallel experiences of their own.

Mr. Hensleigh Wedgwood, brother-in-law to Mr. Darwin, reports a veridical vision with very precise details that occurred to his sister-in-law.

The Marquis of Bute and Dr. Ferrier have described the

phantom of a dead person whom they did not know. Their description is quite sufficient to warrant the assertion that the hallucination was veridical.

The Rev. Mark Hill, one evening when sitting down to supper saw a tall man about to attack him. He jumped up, went to the other side of the table, and threw a glass at the figure, which vanished. He then thought of one of his uncles, who had, in fact, died that day, April 5, 1864 (*Phantasms of the Living,* ii, 1886).

Dr. F. de M., a student of medicine at Paris, dreamed that his uncle in Havana, who stood to him in the place of a father, was about to die. When the servant entered his room in the morning, he found Mr. F. in deep distress, and was told of the dream. The coincidence of the day is exact, if not the hour (*Flammarion,* 413).

Sergeant Nègre heard his wife sobbing in her sleep by his side on the night of November 8, 1912. He waked her, and she said, "My brother Alexis is dead." This was true. A month later, at 11 P.M., she was again weeping and when her husband asked what was the matter, she said, "Mother is dead, I am sure of it." This also was the fact. The brother died on November 8th and the mother on December 8, 1912.

Mme. A. Eugénie, of Lavadina (Italy) on June 8, 1916, thought in her sleep that she heard the step of her son Alphonse, a soldier in the Fifty-fifth Regiment. She got up, saying, "At last, dear son, I can kiss you." She seemed to feel her son sighing in her arms, but it was only a shade. Convinced that he was dead, she had the prayers for the dead offered. Alphonse, unknown to his mother, had embarked on the *Principe Umberto,* which was sunk June 8th between 8 and 10 P.M. (Enquiry through the *Bulletin des Armées*).

Mrs. Palliser, a widow, saw in a dream her only son, Matthew, dead by drowning. Much distressed, she sought out Mr. Clarke, a merchant of Hull, among other persons. He tried to calm her and promised to write to New York to get news; and for a month Mrs. Palliser came to see him daily. At last news came that her son had been drowned on the day of the dream (*Tel. Halluc.,* 150).

At Chicago, Mrs. Paquet, about to pour out tea, saw her brother, a stoker on a small steamboat, caught in the bight of a rope, thrown overboard, and drowned. His trousers were turned up so that the white lining could be seen. He was wearing no

coat, only a sailor's jumper. All these details were exact. When Mr. Paquet heard the news he broke it to his wife by saying, "Edmund is ill in hospital." She replied, "No, he is drowned, I saw him fall into the water" (*A. S. P.*, 1891, i, 208).

M. George Parent, mayor of Wiege (Aisne) travelling in a carriage by night, heard his name pronounced in a stifled voice. He stopped the carriage and got out but could see nothing. When about to get in again he heard his name as if spoken by some one in the carriage, and recognized the voice of an old nurse who was very fond of him. As soon as he got in he again heard the voice speaking low. About a hundred yards further on he went into an inn to write this down in his pocket-book. On returning home he found that old Sophia had died (Flammarion, 100).

An eminent psychologist, M. Pieron, relates a remarkable monition, with full details (*A. S. P.*, xii, 303-309). On June 25, 1902, a young woman, X., was working in his psychological laboratory at the asylum of Ville-juif. She seemed very depressed, and could not be consoled, having heard, at seven minutes past three, the voice of Jeanne, one of her friends, whom she knew to be very ill. On that day at three o'clock, Jeanne had cried out for her friend, X., and in dying she had asked for silence that she might hear her friend come to her. At 4.06 she felt herself *flying*, and said, "If it were to go and see——"; she could not finish, but gasped and died. X. knew that death was near, but thought Jeanne might yet live for some time. M. Pieron's very circumstantial account mentions other facts that might be explained by Jeanne's cryptesthesia; but they may be coincidences. Still, the fact remains that X. showed decided cryptesthesia, along with a very clear auditory monition.

Mr. Rawlinson (Cheltenham), in his dressing-room one morning, saw distinctly his friend X. to whom he had not written for a long time. At that same moment X. was dying (*Tel. Halluc.*, 231).

At the beginning of August, 1878, my grandfather, M. Charles Renouard, aged eighty-four, was slightly ill, but the indisposition did not prevent his remaining up and going about as usual. He was then living at a country house at Stors (Seine-et-Oise) with Mme. Cheuvreaux, his sister-in-law. On Sunday, August 11th, I went to Stors and found him well. It was settled that we were to go from Meudon near Paris where we were living

to visit him for a few days the following week. On the morning of Saturday, August 17th, at 7 A.M., as I was dressing, my wife woke up weeping and said, "It is terrible, I have just seen your grandfather very ill in bed and your mother standing by him" (*Proc. S. P. R.*, 1888, 162). I took no heed of the dream; at that time I did not believe at all in veridical dreams. I easily reassured my wife and we left in a carriage for Paris. I remember we were quite in good spirits. On reaching Paris we found a telegram telling us that on the previous night my grandfather had died suddenly of heart disease about 3 A.M. We did not know that my mother was at Stors; it was a chance visit. The dream was about four hours after the death.

M. R., a clerk in the postal administration, when about to enter an omnibus to return home on March 16th, suddenly saw his mother lying back in her bed, very ill. He seemed to himself to say, "Wait, mother, I am coming." It was about five minutes past six. On reaching home he found a telegram announcing his mother's sudden and serious illness. He then told L., who was with him, of the vision, and L. said that M. R. looked very strange. Mme. R. was taken ill on the morning of March 16th and died at 10 P.M. (*A. S. P.*, 1899, ix, 77).

M. Riondel, barrister at Montélimar, on the night of April 1-2, 1894, heard a loud and unusual noise that woke him and his mother also at 1.45 A.M., with a feeling of fear. At the same hour his brother, who had just written that he was in good health, had died suddenly at Marseilles (*A. S. P.*, 1895, v, 200-202).

Mr. Runciman gives precise details of a monition (*Phantasms of the Living*, i, 433). It began by a dream in which he saw Mr. J. H. Haggit lying in bed. He awoke, asking himself, "Am I awake or dreaming?" There was a little light in the room from the gas-jet. He writes, "I was as much awake as I am now while writing, when the apparition vanished. I was about to speak to him when all disappeared. I spoke of it to several persons." Mr. Haggit, whom he thought he saw, had died the same day at the same hour; he had been ill, but not seriously.

In November, 1904, there were riots at Rio de Janeiro with much bloodshed. Among the students at the military college was young Sylvestre Cavalcante who was killed by a bullet in the head on the night of November 14-15 at 11 P.M. exactly. On that night, about 2 A.M., Mme. Rieken, whose daughter Maria Luiza was betrothed to Cavalcante, saw him enter her room at

Copacabana (Brazil) wearing a khaki uniform, different from his usual uniform, with a red handkerchief round his neck. He said, "Guarda Mimi" (take care of Mimi), that being the name by which he called his betrothed. He then vanished. Next morning Mme. Rieken told the vision to her husband and her son. At that time no one at Copacabana knew of the rising at Rio, nor, *a fortiori,* of the death of Cavalcante (*J. S. P. R.,* April, 1905, 59).

M. Anatole France tells in his vivid style a monition related to him by his grandmother (*Le Livre de mon ami,* 98).

"On the night of the 9th to the 10th Thermidor of the year III (July 27, 1794) we had heard of stirring events—the arrest of Robespierre and the tumults in the Convention and in the city, but nothing more. My grandmother," says Anatole France, "kept her room with my father, Mme. de Laville and young Amélie, her sister. At half-past one in the morning, Amélie, *leaning over a mirror,* seemed to be looking on a tragic scene and cried out, 'I see him! I see him! How pale he is! The blood is flowing from his mouth! His teeth and jaws are shattered! God be praised! The bloodthirsty wretch will drink no more blood but his own'; then she cried out with horror and fainted. At the same hour Robespierre's jaw was shattered by a pistol-shot at the Hotel-de-Ville."

Of course this story, narrated a century after the events, must be accepted with all reserve.

Mme. S., of Luxeuil, when half asleep, saw her brother in a stone sarcophagus like those in the museum of Roman remains. It seemed to be closing in upon him, while he looked at her at first imploringly and then resignedly. Mme. S. then woke up, at 3.30 A.M. At that hour her brother died. He had been ill for some time (Flammarion, 408).

Miss Sanders when awake one morning heard herself repeatedly called by her Christian name. She recognized the voice of a friend of whom she had not thought for a long while. She noted the date (October 27, 1879) in her diary. He had died of cholera in India on that day (*Tel. Halluc.,* 296).

M. Marcel Sérizolles, a magistrate and man of letters, cites some cases of monitions. During an excursion in the mountains he felt a blow on his neck. He stopped and said aloud, "There is a message for me in the town; some misfortune has befallen

me." His father, seemingly in good health, had died suddenly, about three hundred and sixty miles away. The telegram had reached the town of L., where M. Sérizolles was staying, at the time of the monition (*A. S. P.*, 1895, v, 277).

The wife of M. Sérizolles also had a monition. Travelling to Granada, she dreamt, and told her husband, that she had seen Mme. de B. ill and dying. Mme. de B., though near her confinement, was otherwise in good health, but had died at that time (exact dates are wanting).

M. Sérizolles relates another interesting monitory dream. His father was a magistrate at Montauban, and among his relations was a young barrister named L. In 1883, after the death of M. Sérizolles senior, M. L. was appointed judge at N. (Dordogne). Two or three years later M. Sérizolles dreamt that he saw his father as if floating in a cloud, from which a form resembling M. L. emerged, and the sleeper clearly heard his father say, "So it is your turn, L.," who answered, "Yes, it is I"; and they shook hands. Some days after, M. Sérizolles learned that M. L., though still young, had died that day.

The wife of Marshal Serrano, Duke of La Torre, relates that her husband, being very ill, and awaking from sleep induced by morphia, rose up, calling out loudly in the silence of the night, "Quick, let some one take my horse, and hurry to the Prado, the King is dead." He fell back, but repeated in a weaker voice, "My uniform, my sword! the King is dead." At that time Alphonso XII was dying on the Prado, at some distance from the part of Madrid where Serrano was. This fact is cited with all necessary reservations (Flammarion, 439).

Kate Sherman felt a hand on her shoulder as she lay in bed; she looked up and saw her brother Stewart. She woke her sister, who saw nothing and laughed at her fears. She went to sleep again with her head under the coverlet, and again saw her brother, whose image persisted for a time and gradually disappeared. She awoke her sister again. Stewart died the same night, July 4-5, at 1 A.M.

The following is from Victor Hugo's *Choses Vues*. It is reproduced textually. The case is doubly interesting, for besides the fact of the monition it was addressed to a person who (though only slightly ill) was about to die, and was asked, "Are you coming?"

"On the 27th of November last, an old woman named Mme. Guérin, sixty-six years of age, living at No. 34 (fourth storey) in the street Fosses-du-Temple, was slightly ill with an attack which her doctor thought to be indigestion. It was five o'clock in the morning; her daughter, a widow named Mme. Guérard, had risen early, lit her lamp, and was working by the fire at her mother's bedside. While working, the daughter said to her mother, 'Why, Mme. Lanne must have come back from the country.' (This Mme. Lanne, a good-natured stout woman of sixty, had retired from a grocery business at the corner of the streets St. Louis and St. Claude, with an income of 40,000 francs and lived on the first floor in the Boulevard Beaumarchais, in a new house.) Mme. Guérard added, 'I must go and see her today.' 'No use to do that,' said her mother. 'Why, mother?' 'She died an hour ago.' 'Why, mother, what do you mean? Are you dreaming?' 'No, I am quite awake, I have not slept, but as four o'clock struck I saw Mme. Lanne pass, and she said to me, "'I am going, are you coming?"' The daughter thought that her mother had dreamed it; and later in the day went to see Mme. Lanne, only to find that she had died at 4 A.M. The same evening Mme. Guérin vomited blood, and the doctor said, 'She will not last twenty-four hours.' The next day at noon she had a second attack and died.

"I knew Mme. Guérin, and the story was told me by Mme. Guérard, a pious, good woman who never told a lie in her life" (Victor Hugo).

Mr. J. Addington Symonds, while still at Harrow School, woke in the middle of the night and felt he must look round. He then saw between him and the door Dr. Macleane, dressed as a clergyman, who said to him, "I am going on a long journey; look after my son." Then he vanished. Dr. Macleane died the same night at Clifton. Young Symonds knew of his chronic illness, but did not think him more ill than usual (Hyslop, *Science and a Future Life,* 50).

Mr. Sings, a sailor of little education, left his father, also a sailor, one Good Friday, to embark on a large sailing-ship. After some very stormy days, in heavy weather, he saw his father on the bridge near him, saying, as usual with him, "Look to your helm, Joe." He continued to see his father walking to and fro on the bridge *for three hours.* His father several times clapped

him on the shoulder, and told him to be careful at the wheel. Joe felt that his father must have been drowned to appear thus to him, and would no longer remain at the helm. The date and hour agree with the time of the father's death (*Tel. Halluc.*, 318).

Mr. Shirving, master mason at Winchester Cathedral, felt himself irresistibly impelled to leave his work, which was pressing; went home at 10 A.M. and found that his wife had been run over by a carriage and was calling him (Chevreul, *On ne meurt pas*, 31).

Mme. de Thiriat, the aunt of M. d'Arbois de Jubainville, who tells the story, was dying and seemed, four or five hours before her death, to become composed. She said, "I am calling Midon to my funeral." Two hours later, Midon, an old servant who lived some six miles away, arrived dressed in black, saying that she had heard Mme. de T. calling her to her death-bed (Flammarion, *L'Inconnu*).

Mme. Storia gives a very circumstantial dream (too long to be detailed here), in which she saw her brother, William, lying on the ground with the smokestack of a locomotive near his head. Her brother's death in a railway accident took place the same day at 9.55 on July 18, 1874 (*Tel. Halluc.*, 112).

Colonel Swiney, at Shorncliffe Camp, saw in the daytime his brother (who was in India), approach him, and then vanish. He told his comrades. Taking account of the longitude, the hour of the death and of the apparition coincide (*Tel. Halluc.*, 253).

M. Tamburini, professor at the University of Rome, reports several cases (*A. S. P.*, 1893, iii, 292): Mme. V. Guicciardi, the wife of the principal doctor of the asylum at Rome, while sleeping at home, heard herself called loudly by name. She went into the adjoining room to find her husband, and returned to sleep. She then dreamt that her friend G., who was ill, but had written two days before that she was slightly better, had died. It was 6 A.M. At eight o'clock a telegram arrived announcing the death.

The next case is probably not a coincidence, though coincidence is quite possible. A female patient in the lunatic asylum at Reggio died on May 21, 1892, at 11 A.M. Her husband had not asked for news of her since December 20, 1890; but on the 23d of May a letter arrived from Mantua from the husband saying that on the 21st he had felt a disturbance presaging some misfortune.

Dr. Giacchi, when a student, aged eighteen, at Pisa, saw his

father, pale and dying, who said to him, "Kiss me for the last time, I am about to leave you forever." He felt cold lips on his mouth. With no other reason for apprehension, he left for Florence next morning, and found that his father had died at the time of the vision. This took place in 1853 when telegraphic communication was imperfect. However, Dr. Giacchi's story refers to an event so long past that it must be taken with some caution.

Dr. G. Orsi saw in a dream (July 2, 1858) the *Adria Doria,* on which his brother had embarked, caught in a storm. The dream was repeated on the two following nights. He saw the wreck, but felt that his brother was among the saved. On July 8th he received a telegram from Gibraltar announcing the loss of the ship in the storm of the 2d and 3d of July, but that his brother Alexander was safe.

Dr. Cornis, of Parma, relates that his sister, being then very ill, was visited by her brother Henry, a lieutenant in the Bersaglieri, who was leaving for the war, but of this she was not told. Some time later, before her death, she awoke from a half-sleep saying, "Henry is killed." He had fallen at Custozza, June 24, 1866.

Mrs. Teale, whose son Walter was returning from the Soudan on sick leave to England, saw him bend over to embrace her and disappear. Walter had died on that day some five or six hours before (*Tel. Halluc.,* 280).

A medical lady, Marie de Thilo, at Lausanne, heard knocks at her door at 6 A.M. The door opened of itself and a form appeared covered with vaporous white stuff, like a veil over a black ground. "The cat in my room growled and hissed with all its hair on end." Some time after Mme. de Thilo learned that one of her best friends, of whom she had not thought at the time of the apparition, had died of acute peritonitis in India on the night following the dream (Flammarion, 156). As there was no recognition no great importance can be attached to the dream as a monition; but the episode of the cat seems to show that the apparition was not perhaps entirely subjective; this episode was perhaps misinterpreted or exaggerated, and is insufficient to establish objectivity.

The soldier S. went to see one of his comrades in the ambulance, who, as S. was leaving, said to him, "Good-bye, and

think of me." In the night of March 27th S. had a dream which he noted in his route-book: "March 28th, I saw G. dying, a bright light shone round him . . . his face was terribly thin and disfigured . . . I shall see him no more . . . I am afraid." On April 18th, "It is true then, he died thirteen days ago . . . no one near him to console his last moments, I saw him in his coffin, and choirboys in red tickling each other's necks and laughing." It would appear from S.'s letter that his friend died on March 28th (Enquiry through the *Bulletin des Armées*).

The soldier D., schoolmaster of Lieuron (Ille-et-Vilaine), wrote from the front to his wife, "Perhaps you will say I am mad, but I think my mother has died . . . Tell me the truth." With the letter Mrs. D. received a telegram announcing the mother's death, though she had not been ill, but had resumed her work after a short indisposition (Enquiry through the *Bulletin des Armées*).

The son of M. Viaud, professor in a school at Bordeaux, had left with his regiment August 6, 1914, and news of him had come regularly. "On the 22d of August at 9.15 P.M., having been impelled (by an external influence) to go to my bedroom, I had hardly laid my head on the pillow and switched off the light, when I saw clearly at the foot of the bed the image of my son with a large black patch covering his left eye . . . I was convinced that he had been mortally wounded during the day. The vision still persisting I mentally exclaimed 'Enough,' and the luminous appearance vanished. It was not a dream" (*A. S. P.*, March, 1916, 60).

On August 24th there arrived a letter written on the 20th. Young Viaud was missing after the battle of August 22d in Belgium. No news has been since received, and the manner of his death is not known.

Corporal Lebrun had a dream or nightmare which moved him most profoundly. He noted the fact in his pocket-book, which has been lost. He dreamt that he was at a funeral, many persons in mourning, weeping, and he thought of a cousin to whom he was greatly attached. She had just died suddenly (Enquiry through the *Bulletin des Armées*).

M. Uranenko was asleep, and was waked by someone touching his back. He opened his eyes and saw his sister, aged fifteen,

sitting on his bed; she said, "Good-bye, Nadia," and vanished. She had died at that hour, 5 A.M. (Flammarion, 436).

Mme. d'Ulric (the pseudonym of a distinguished writer), heard repeated knocks on her table during the night of July 1, 1919, about 11.30. She sat up to hear better. The rhythm was that with which her son when a tiny boy was used to say, "Maman, Maman," then the knocking, becoming stronger, displaced two small glass vases. She tried to persuade herself that it meant no bad news, but that night, her son, then a sergeant of infantry, had been killed (*A. S. P.*, xxix, 24-29).

On November 8, 1864, in the morning, Sarah Wight heard herself called by name from outside. Mr. Hazhatt, who was with her, also heard it distinctly, but no one was there. The date of her mother's death agreed with the time (Chevreul, 49).

L. V., at Bordeaux, working at his table, had the feeling that the door had opened. He turned, and saw for a moment the form of his uncle, G. A quarter of an hour later he had a telegram telling him that his uncle had committed suicide. The monition was at 9.30, the suicide at 5 A.M. The telegram reached Bordeaux at eight o'clock (*A. S. P.*, 1897, vii, 114).

Valentine C. had in her room a photograph of her friend Helena. One day having retired to her room after dinner, she was studying a problem of geometry, but felt constrained to look at the photograph. The eyelids seemed to move and the mouth to open as if about to speak. The clock struck eight. Thinking she must be dreaming, she rubbed her eyes and looked again. She distinctly saw the lips move, the eyes open widely, and then slowly close with a sigh. Much frightened, she dared look no more, went to bed, but could not sleep. A telegram telling her of Helena's death soon reached her. Helena, the day before her death, had repeatedly said, "Perhaps Valentine is looking at my photograph" (Flammarion, 165).

The next instance deserves note, though it is not told by the percipient, Dr. Vogler, but by a friend who had it from him. M. Vogler, travelling in Germany, heard the door at the foot of the stairs open and shut. Then dragging footsteps came along to the door of his room which opened, though there was no one to be seen, but the steps were still heard and seemed to approach the bed. At the same time he heard a deep sigh and recognized the voice of his grandmother, whom he had left quite well in

Denmark. He still saw nothing, but noted the time. It was proved that his grandmother had died at the same hour. The case is interesting, not only because of the recognition, but by the percipient's clear dissociation of the sensorial phenomena (Flammarion, 72).

Mr. W. dreamt, early in the night, that he saw an old lady with white hair but black eyebrows looking fixedly at him and nervously fingering the ribbons of her cap. He did not recognize her, but, still in the dream, his aunt came, and said, "What, John, don't you know your grandmother?" On waking he noted down the fact; and soon after learned that his grandmother had died, far away in the Isle of Wight. She had white hair, which her grandson, who had not seen her for a long time, did not know (*Tel. Halluc.*, 329).

The Rev. Mr. Wanley dreamt that he saw a friend, a professor of mathematics in Guernsey. In the morning he told his wife that he believed Mr. B. to be dead. The day, and probably the hour of death, were correct.

Mrs. Wheatcroft, whose husband was a captain in the Dragoon Guards, and had left for India, saw on the night of November 14-15, 1857, the form of her husband bending over her and trying to speak. This occurred twice. In the morning she told her mother, being sure that he was dead. A month later she received official notice of his death on November 15th. She insisted that the death must have been on the 14th, and after minute enquiry, this was confirmed. The case is extremely striking and deserves to be considered highly evidential, the metapsychic monition having actually led to a change in the date of the registry of deaths by the War Office (*A. S. P.*, 1891, i, 51).

Mr. Williams was sleeping, his hands outside the coverlet, when he was waked by the sensation that his hands were held and pressed. He sat up and saw his young brother-in-law, aged nineteen, whom he knew to be extremely ill. He looked at him with affection and felt in no way frightened. The room was lit by the rising sun. He rose and told his wife, "I have seen George, he came for a minute at sunrise." In another part of London George expired in the arms of his father and mother, the former of whom said, "The sun rose just as our dear boy rose to the heavenly kingdom" (*Tel. Halluc.*, 142).

Mrs. Williams (another case) heard the voice of her son cry

out, "Mother, Mother"; she felt a hand on her breast and saw the form of her son looking very ill. Mr. Williams, to whom she told her vision, advised her to put no faith in it. Her son died at sea of yellow fever at the same hour (*Phantasms of the Living,* i, 440).

Mr. Wingfield Baker saw in a dream, on the night of March 25-26, his brother Richard Wingfield Baker. The impression was so strong that he rose and went to see if his brother were not really there. He felt sure that some disaster had happened, and wrote in his note-book, "Apparition, night of Thursday, March 25, 1880, R. B. W. B. God forbid!" On that day his brother was killed in the hunting-field.

This monition is one of the most reliable on record, on account of the unforeseen nature of the event and the note taken at the time (*A. S. P.,* 1891, i, 45).

Mrs. Wright left her little girl, aged four and a half, playing in the street. Crossing the yard a few minutes later, she saw the child pass before her like a luminous shadow. She stopped, failed to recognize the child, looking attentively at the form for half a minute. A moment later they came to tell her that the child had been run over and killed by a passing carriage. Although there was no recognition, the case is interesting by the precision of the details (*Tel. Halluc.,* 268).

Dr. Woolcote, doctor on board the ship *Plantagenet,* going from India to England, saw his dying mother in a dream, and by her side, a cousin, a surgeon in the Royal Artillery, whom he thought to be in China. The dream was so distinct that he went to wake one of his friends. On reaching the docks, he saw his father who was not in mourning, and thought, "All is well, my dream deceived me." Nevertheless the dream was true, his mother was dead and his cousin had been present. The coincidence of time is somewhat uncertain (*Tel. Halluc.,* 108).

Mrs. Wickham, at Malta, was anxious about the health of a friend at Brighton. She went out to dine, but was still disquieted. As she was undoing her hair that evening she felt the pressure of a hand on her head and neck; and shortly after cold lips were pressed to her cheek and she heard her friend's voice saying, "Good-bye, good-bye." Nevertheless she went to sleep, and saw her friend enter. He was very pale, kissed her, and disappeared.

She noted down the dream. Some days later she had news of his death on the day and at the hour of her first monition, 10 A.M. on March 13th.

Captain Calt, suddenly waking up, saw his brother, then an officer in the Crimea (1854) looking at him affectionately. He walked through the apparition, which then appeared behind him with blood on the temple. Much disturbed, he went to a friend's room. Next day his father forbade him to speak of the apparition. It took place a few hours after the death of Oliver Calt who had been struck by a bullet in the temple in the assault on the Redan (*A. S. P.*, 1891, i, 166).

Mr. Bard, living at Hingston, passed by the cemetery on his way home and saw there Mme. Fréville who lived in the same town, a rather eccentric person who interested herself in the graves. She seemed dressed as usual, but her face was very white. She looked fixedly at Mr. Bard, and soon disappeared mysteriously. Mr. Bard ascertained that there was no open grave into which she might have fallen. In point of fact, this lady, of whose illness Mr. Bard knew nothing, was dying at that moment. The vision was so clear that Mr. Bard was certain of the identity (*A. S. P.*, 1891, i, 171).

Mr. Jones, an English officer in Burma, while chatting with his friends, suddenly saw a coffin and in it one of his sisters. He stopped in the middle of his talk, and being very sceptical on such matters, laughed at what he had seen. His sister had died in England on that day (*A. S. P.*, 1891, i, 173).

Signor Sebastian Fenzi, at the sea-side (Fortoula) about sixty miles from Florence, under great disturbance of mind, saw his brother, Senator Carlo Fenzi, whom he recognized by his large white moustaches, walking quietly from rock to rock in spite of the torrential rain and storm. He waved his hand and shouted to the apparition, but it disappeared among the rocks. At this moment a young cousin, black-bearded and quite different in appearance from Carlo Fenzi, emerged from the woods, not having passed by way of the rocks. On returning home Signor Fenzi learned that his brother was dying. He left for Florence at once, but his brother had already expired. Some months before his death, Carlo Fenzi had said to his brother Sebastian, "Whichever of us dies first will come to warn the other, but I am sure that I shall die before you; in three months I shall be no more."

This conversation took place in June, and Carlo Fenzi died September 2, 1881 (*A. S. P.*, 1891, i, 174).

On December 28, 1906, at 11 P.M., Mme. X. saw at her bedside the form of a woman whose features and dress she could clearly distinguish. The apparition spoke in a muffled voice, saying, "I am Helen Ram, I will come for you; we shall be together in the other world." Helen Ram died at Hyères, on December 28th, at 4 A.M. There was therefore a difference of twenty hours between the time of death and the time of the apparition. The details of the dress were correct. Mme. Ram had not been ailing, and Mme. X. did not know her well (*A. S. P.*, 1907, xvii, 607).

General X., very highly placed in the French Army, wrote to M. de Rochas: "In 1832 I was five years old, and was sent to my maternal grandmother, where I slept with a cousin of my own age. We were prattling in bed, and when the light was put out I saw the figure of my grandmother on the father's side at the foot of my bed. I had just left her and she was very fond of me. She died at the very hour she appeared to me" (*A. S. P.*, 1891, i, 260).

Mr. S. saw, in the daytime, in a corridor of his house, a kind of mist which thickened and gradually took the form of a man whose head and shoulders became more and more distinct. The rest of the body seemed wrapped in a sort of gauze, like a mantle covering the feet. The apparition was grey. The head turned towards him with a gentle, peaceful expression and disappeared like a jet of steam condensing. S. then remembered a friend whom he had not seen for some weeks and had not thought of that day. This friend had died suddenly at the same hour (*Tel. Halluc.*, 182).

M. A. Z., after a friendly chat on trivial matters with his young friend, B., went home and began to read. He heard the outside door noisily opened, followed by hurried steps clearly heard along the road. Mr. Z. felt that there was something near him outside the glass of the window. He heard short panting breaths like someone getting breath before speaking. Then suddenly, like a gunshot, a loud cry, followed by a moaning, and sobs of great pain. His wife heard nothing, but, seeing her husband's alarm, said, "What is the matter?" M. Z. replied, "There is someone outside, but it is so strange and horrible that I dare not go out." At that very moment, but too far away for any sound to reach the

house, B. had poisoned himself with prussic acid and had fallen with a loud cry (*Tel. Halluc.,* 302).

Mrs. Meneer, wife of the principal of Torre School (Torquay), dreamt one night that she saw her father's head in a coffin at the foot of the bed. Her father, Mr. Wellington, was in the Indian Army, and had been taken prisoner by the Chinese, and had been beheaded, his head being carried in triumph to their camp (*Human Personality,* i, 424).

The following case, though not strictly a monition of death, is so similar that it should be placed among these:

Dr. Bruce, of Micanopy (U. S. A.) on the night of December 27, 1883, dreamt that he saw a brawl in which a man was seriously hurt, his throat being cut. He did not recognize the man, whose hands were before his face, but Dr. Bruce saw his own wife by the side of the wounded man, saying she would not leave him till he were helped. That same night his brother-in-law had been wounded in the course of a quarrel by a dagger-stroke through his neck. It seems that on the same night, another sister of the wounded man had dreamt of a man whose throat was cut, without, however, recognizing him (Myers, *Human Personality,* i, 413).

Mme. Suzanne Bonnefoy, whom I knew as an intelligent and large-hearted woman, relates that at Cherbourg in 1902, she received a telegram telling her of the death of her husband's mother, Mme. Bonnefoy, at Marseilles. Dr. Bonnefoy had then been twenty-four hours in hospital, and when he heard the sad news, he said, "My mother must have died about ten o'clock last evening, for when half awake in my bed here, it seemed to me that someone kissed me; I even said aloud, 'Is it you, Suzanne?' Although entirely sceptical on metapsychic matters Dr. Bonnefoy was convinced that there was some relation between his very definite feeling and the death of his mother. The exact agreement in time was verified (*La Mort et son Mystère,* ii, p. 333).

Dr. Auguste Manceau, of Paris, saw in a dream the form of an aunt who was very dear to him. She was very old but in quite good health. The shape was not very clear, but he says no doubt was possible, the vision was not like a picture but—"an image formed by light." He sent a telegram and found she had died at the hour of the dream (Flammarion, *loc. cit.,* ii, 408).

The husband of Mme. Belot, of Montpellier, was in Algeria. One day at 4 P.M. she was dozing and it seemed to her that she saw her husband, looking pale and thin, who said, "Good-bye, I am going." The next day she learned by telegram that he had passed away at that hour (Flammarion, *loc. cit.*, ii, 355).

In 1893, Captain Moureau was at sea off the Antilles, and went to his cabin about 11 P.M. Just as he was going to sleep he felt distinctly a weight on his chest like a child's body, felt the two arms round his neck and a kiss on his lips. He pushed the body away and lit a match, but saw no one. He told his experience to a friend next morning and on arriving at Gibraltar learned that his little child, aged two, had died that night of diphtheria (*A. S. P.*, 1919, 71).

M. X., of Moutiers (Vendée), dreamt that he went to his parents, and saw in their room an improvised bed on trestles, with a number of persons standing round, that he passed through them and saw his father's body on the mattress. He woke sobbing and told his wife. The vision corresponded exactly with the facts (Flammarion, 340).

M. Contamine, at Commentry, while dressing, saw in the mirror his door open and one of his friends enter in evening dress. He turned round, much surprised, and saw nothing. He asked the servant who was on the stairs, but she had seen no one. This friend had killed himself that same hour, being in evening dress (Flammarion, *loc. cit.*, 340).

The naval captain E. P. N. writes: "On the 9th of January, 1892, sleeping at Toulon, I was waked by someone, and saw Admiral Peyron standing by my bed with his hands in his pockets. He pushed his body against me and said, 'Good-bye, P., I come to bid you good-bye.' I got up and lit a candle but the apparition was no longer there; but I had hardly begun to go to sleep again when the same thing recurred; only then the form became veiled in cloud and disappeared like a vapor."

Captain N. was serving under Admiral Peyron, who was very ill and died that night. Fleet Engineer G. had the same vision in a dream that same night. Admiral Peyron appeared to him, saying, "My dear G., the time has come to part; we all have to go that way. Good-bye." The cryptesthetic character of this double monition is not nullified by the fact that both Captain N. and the chief engineer knew the admiral to be very ill (Flammarion, 273).

Mme. Suzanne Ollendorff, the wife of my excellent friend, Paul Ollendorff, relates that one morning she suddenly thought of an aunt of hers, and said to herself, "She is dead and the priest of her parish is coming to tell me so." Paul Ollendorff, who was not then married to Suzanne L., went to see her that day and she told him the dream saying, "If the parish priest of X. were at the door now, I should not be surprised." Paul continued sceptical, but during the day (he was then editor of the journal *Gil Blas*) he received a visit from the priest who told him of the lady's death by cerebral congestion (Flammarion, 273).

Mr. Leadbater says that his friend, Mr. X., in whom he has entire confidence, had a very clear hallucination, repeated three times the same night: he saw his father's form by the light of a bright fire burning in his room, first at 10.30, then again at midnight, and once more at 1.50 A.M. He tried to touch the apparition but his hands met empty air, and the vision gradually disappeared. His father died that night, the death-spasms beginning at 10.30 and ending at midnight (Flammarion, 330).

Conclusions

We have now reached the end of this long list of facts. It is decisive, for all these monitions, apparitions, and powerful sensations cannot be explained by mental hallucination of the perfectly normal persons who relate them. It would also be equally inept to refer them to a long series of chance coincidences.

It is therefore well established that at the moment of death some vibration takes place, moving something in nature, which occasionally gives information of the death to those who are sensitive. That is cryptesthesia, an unusual and supernormal faculty peculiar to sensitives.

It generally takes an auditory or visual form, but most probably the vision itself is a hallucinatory symbol. A. dies and the notion of his death reaches B.'s subconsciousness. But in order that B. may understand, the creative power of subconscious imagination elaborates a phantom resembling A. more or less and surrounds the vision, which is really internal though seemingly external, with detail which may be symbolical or veridical, just as occurs in delirium and in dreams.

We may provisionally suppose that death being a more moving event than the facts of daily life, it sets in motion a stronger vibration than the latter. Let us, therefore, admit the fact of

cryptesthesia, but go no further; let us simply say: A.'s death is a reality, B., by his cryptesthetic faculty, perceives that fact and represents it under the symbolical forms to which alone our intelligence is open.

This involves no theory, and proposes no hypothesis; it merely states the adaptation of B.'s cryptesthesia power to the external fact of A.'s death.

It is obvious that the veridical monitions of death strongly confirm all that has been said above on experimental cryptesthesia. If those experiments left any doubt on the mind, the mass of observed fact should dispel it. Human cognition is not limited to the mechanism of the ordinary senses; there is a cryptesthetic sense—a mysterious faculty of cognition.

Let us, however, attempt a preliminary analysis. Does the will of the dying play any part?

If so, the thought of A., dying, would be directed to his friend, B., to whom he has perhaps promised to appear; and this thought, moving in space, would influence B.'s thought.

The simple explanation that first occurs to everyone is that A. has himself appeared in his "astral body." This hypothesis is difficult to sustain, for in many cases the monition is not given by the apparition of the deceased, but by a third person who has been present at the death.[1]

Sometimes details are apparent that the dying person could not know, so that the inference seems to be that there is cognition of a fact, whether by a symbol, or by a phantom, the phantom itself being symbolical.

It would, therefore, seem most probable that the human soul—the intelligence of the percipient—is moved by some power that reveals the truth or a fragment of the truth; but it is very hard to know whether this truth is announced by an intelligence that wills to convey it, or whether it results only from vibrations set in motion by the events.

If, instead of confining oneself to the study of instances, we analyze them as a whole, we are often led to think that there seems to be an intention in them, an effort to make the facts understood, and therefore, that they present themselves under symbolical forms. But to attribute such an intention to *things*

[1]Voy. Mme. A. Sidgwick, *J. S. P. R.*, November, 1906, 321. Case L. 1153 et *Phantasms of the Liv.*, i, 357 et *P. S. P. R.*, x, 261.

is perhaps an anthropomorphic mode of reasoning; as when a peasant whose crops are perishing from drought sees the act of a compassionate Deity in the welcome rain.

Nevertheless it is difficult to explain some collective monitions, some premonitions, and some phenomena of haunting, without seeing in them an effort by an exterior power to reveal a fragment of truth only realizable to our defective intelligence by some representation symbolical of the fact itself.

Frequently there is actually a vague intention on the part of A. that is perceived by B. Jeanne when dying calls on Mlle. X. and dies, saying, "If it were to go and see . . ." and X. hears herself called.

Mr. Dickinson is preoccupied about his portrait while seriously ill, and his double visits the photographer. Mr. Noell's sister, when dying, calls vehemently on her brother. Jim had promised to visit Mrs. Bishop at his death. The Rev. Field hears his mother call, "Harry, Harry," from her death-bed. Mr. D.'s workman is concerned to justify his conduct.

On the other hand, there are very many cases in which the phantom (cryptesthetic symbol) has appeared to uninterested persons. Mrs. Green was not interested in the Australian niece whom she had never seen. When the Duke of Orléans died he was certainly not thinking of Mme. Bremon; nor Robespierre of Mme. X. When M. Halle saw the cabman's little girl fall from the window the child certainly did not wish to communicate with him, any more than Mr. Phibb's dog with his master.

We are wandering in the darkness, and it seems wise to reserve judgment. Let us say only that in most cases the monition does not seem to be intentional on the part of A., and that the notion of A.'s death reaches B. because it is a reality; his cryptesthesia perceiving that reality.

To decline to admit the intention of the dying and the intervention of the astral body is not to maim the facts; it is only a refusal to go beyond them. It is quite possible that some day, when metapsychics is more advanced, we may come to admit telepathy from the dying to the living; no one can foresee what future science may reveal to our grandchildren, but as yet no one is justified in making gratuitous assumptions or frail theories.

Let us remain within the boundary of indisputable facts—

that the death of a human being is often known to other human beings by means outside the action of the normal senses; that this monition of death is shown by a great variety of symbolism, and that monitions are nearly always entirely subjective, although in exceptional cases they seem really to have objective reality.

Such are the inferences that flow from monitions of death; but, as Geley, Bozzano, and Lodge rightly point out, explanations that cover a series of facts are insufficient, if they apply to that series only. All must be coherent. No theory can be built on monitions of death, or on cryptesthesia, or on ectoplasmic forms, each taken by itself. Any satisfactory theory must be applicable to *all* the facts, at least in some degree. Any general conclusion must therefore be deferred till all the facts have been examined.

IV. COLLECTIVE MONITIONS

Collective monitions seldom take place.

Before studying these we shall show that some non-collective monitions perceived by one person only have occurred under conditions such that if there had been any external physical phenomenon it must have been perceived by others present. Such monitions are therefore indisputably subjective. And as it is most important that the exact meaning of the terms "objective" and "subjective" in metapsychic science should be clearly understood, I return to this matter.

The light of a rocket and the sound of a gunshot are objective; they can be mechanically recorded.

That a monition should be produced at all there must necessarily be some vibration of surrounding forces, and some exterior fact to produce it. But this objective phenomenon that starts sensation in a sensitive is not objective in the same way as the vibration of the air that produces sound, or that of the ether that produces light; it is a special kind of objectivity whose nature is quite unknown, and it has the peculiar property of acting only on certain individuals and not on any physical apparatus.

When Mrs. Thompson, taking my son's watch, says, "Three generations mingled," there is doubtless some vibration that has

given her this knowledge, but no other person could have perceived it.

The sensibility of individuals to cryptesthesia may vary as 1 : 100,000, whereas their sensibilities to sounds, colours, lights, and odours may be as 10,000 to 10,001.

This is not all. When a vision appears to B., and he thinks he sees A., it is not proved that the form A. that B. thinks he sees is A., in the ordinary meaning of *seeing*. All we can say is that he has the notion of A., and that he interprets this objectively as A. *Something* that calls up A. in his mind reaches him; but what is it precisely? The transformation of the vague notion of A. into a visual image of A. is an entirely subjective phenomenon.

There is no hypothesis here; it is mere fact. In some well-authenticated cases B. has been surrounded by persons who see nothing where B. sees something distinctly. Therefore B.'s perception has been subjective in the ordinary sense of the word.

I give below some instances which should have been collective if the phenomenon had not been entirely subjective.

Mrs. Taunton at a concert saw the apparition of her Uncle W. between her and the orchestra. She did not know of his illness, but he seemed to be lying in bed and calling her as if dying. The apparition was not vaporous, but yet she could see the orchestra through it. Her husband asked her why she was "fascinated" in that way. The vision disappeared, and after the concert Mrs. T. narrated what she had seen. Mr. W. died at the exact hour of the vision.

Mrs. Purton hears a terrible cry and anguished moanings that filled the house. She wakes up, terrified, goes over the whole house, but finds all quiet and everyone sleeping. In the morning she asks if anyone has heard an unusual noise, but no one has. A few days later comes the news of the drowning of her son Frank coming from Australia in the *Royal Charter*, lost with all passengers at the hour of the monition.

Mr. King, of the Royal Military College, returning home with his friends through the country at 10 P.M., says suddenly, "Look there, look there," pointing to a part of the wood. His friend M. could see nothing. King fell to the ground groaning and got up as if he were intoxicated. Then he cried out, "Where are they carrying her? I say they are carrying her." The next morning he could remember nothing of all this; but he found

that an old lady of whom he was very fond had died of heart disease at 10 P.M. precisely (*Tel. Halluc.*, 247).

Bertha Hurly frequently went to visit Mrs. Evans, an old woman who was ill but in no immediate danger. One evening at table she saw a form dressed like Mrs. Evans cross the room and disappear. "I said, 'Who is that?' and my mother replied, 'What is the matter with you?' I said, 'That woman who went from one door to the other was Mrs. Evans.' They all laughed at me." At that hour Mrs. Evans was in delirium and died the next morning at eight o'clock.

Mr. B., taking tea with his son and his son's wife, said suddenly, "Who is looking in at the window?" No one could have got up to that particular window, but Mr. B. insisted that he had seen the face of a pale woman with dark hair. He was quieted only when they had gone round the house and found no one. The time was 5:45 P.M., and Mrs. B.'s mother died in Guernsey at that same hour (*Tel. Halluc.*, 180).

Mr. Mouat, on reaching his office, saw an employee speaking to the porter and also the Rev. Mr. H. standing at the door. The clergyman, who worked at the same office, did not usually arrive so early. Another clerk coming down the stairs also saw Mr. H., and went out without getting any answer from him to a jesting remark. Mr. Mouat, being left alone with Mr. H., looked straight at him, was surprised at his melancholy expression, and remarked that he was wearing no cravat. "What is the matter?" he said, "You seem troubled." H. made no reply but continued to look steadily. At this moment the clerk returned, but saw nothing, and H. disappeared. On the one hand it is averred that neither the clerk nor the porter saw H., and on the other, that H. was out of London on that day (*Tel. Halluc.*, 358).

This case is more perplexing than the others, for two persons out of four saw Mr. H. and spoke to him, while two others saw nothing. The materialization (to adopt this word provisionally) only seemed to be such to two persons. It was therefore not an objective fact, or rather it belonged to both categories.

(*a*) *Collective Monitions, Non-simultaneous and Non-identical*

The metaphor of a human race devoid of the sense of smell will enable us to understand somewhat better the significance of these mysterious phenomena.

Let us suppose that a gust of wind brings a whiff of violets to twenty of these persons in a room. None of them will perceive anything. But if one among them has the sense of smell for a few seconds, he will get the notion of violets.

If now the same odoriferous breeze brings the same scent to another exceptionally sensitive person near by, that person will also have the notion of violets, alone among others there present. This would be a collective but non-simultaneous monition; and we may compare individuals endowed with permanent or transient cryptesthesia to persons endowed with the sense of smell among those devoid of it.

Mrs. Hunter, awake, and in the daytime, sees a large coffin on the bed, and an old woman, tall and stout, at the foot of the bed, looking at the coffin. The vision was so clear that she could describe the clothing.

The figure vanished and Mrs. Hunter related the fact to those who visited her. That evening the governess came in very frightened, saying that she had seen an old woman in the sitting-room who seemed to dissolve as she looked at her; and described the dress just as Mrs. Hunter had seen it. Mrs. Hunter's little girl of five, pointing at a part of the room where her nurse saw nothing, cried out, "Go away, go away! Naughty ugly old woman" (Bozzano, *A. S. P.*, 1907, xvii, 631).

The Rev. Mr. Jupp, director of an orphanage, waking in the middle of the night, saw a light in the dormitory. A small luminous cloud floated over the bed of one of the children. He sat up and looked at his watch, it was 12.55, and was about to get up to touch this strange light, when he "felt rather than heard" the injunction, "Remain in bed, you will suffer no hurt." He went to sleep again. In the morning the child over whose bed the light had been, said to him, "My mother came to me last night; did you see her?" The child was four years old; his mother had been dead six months.

Three brothers Swithinbank, though living apart from each other, had the same dream on the same night, that their mother was dying; she not being ill at the time (*Phantasms of the Living*, ii, 382).

Miss Beale sees a man in a flowing dressing-gown enter her room; and the same night, C., in an adjoining room, also sees an apparition, which he recognized.

Mrs. Treloar, entering her room at 8 P.M., sees on the further side of the bed a woman's figure, very pale and with an expression of suffering, wearing a hat and light cloak. The lamplight on the face showed even the freckles on the nose. Mrs. T. recognized her sister who gradually disappeared. Just then Mrs. T.'s little niece ran in, saying, "I have seen Aunt Annie, I have seen Aunt Annie." This apparition does not coincide with the hour of death, but with an attack of acute diphtheria that carried her off in twenty-four hours (*Tel. Halluc.*, 290).

Popular superstitions and beliefs or religious legends carry little or no weight with me; but perhaps they should not all be dismissed without consideration. The extraordinary facts related in the lives of the saints are neither complete falsehoods nor absolute errors, as, for instance, levitations. There is probably some amount of truth imbedded in all such tales. But it is better to try new experiments and make fresh observations than to search for whatever small amount of truth these legends may contain or than to deny them altogether.

Many popular superstitions exist relative to movements and noises relating to deaths. There are many tales resembling monitions, but the events chronicled—breakage of mirrors, falling of pictures, blows on the doors, etc., presaging death or disaster—are rarely such as to carry recognition. I will merely mention a few of these monitions; for even though there be no recognition, one can, and even ought, to give weight to the coincidences.

M. Jaffé, at Berlin, in bed about midnight, but perfectly awake, hears the ticking of the "death-watch." He got up, and heard the raps follow him to different parts of the room. The next morning his wife said to him, "I saw your mother in a dream with a handkerchief tied under her chin; her mouth was much contorted." Soon after, M. Jaffé heard of his mother's death, accompanied by such strong contortions of the face that it became necessary to tie up the jaw by a handkerchief passing round the chin.

M. Lemonnier, chemist at Rennes, had two intimate friends, M. Escolan and M. Nivot, a surgeon-dentist. M. Escolan, who was in feeble health, was attacked by acute tuberculosis and was taken to the hospital. One morning in September, 1891, at 5.45 A.M., M. Lemonnier was awaked by violent blows on the shut-

ters of his pharmacy. He writes: "I thought, 'Who can it be who knocks like this instead of using the night-bell?' for he was drumming on the shutters for one or two minutes. I dressed in haste and went to open. There were only a few women sweeping in the street, who said they had seen no one."

About an hour later his friend M. Nivot came at seven o'clock, who said, "A singular thing has occurred; at 5.45 I was awakened by knocking on the door of my room, and I called out, 'Who is there? Don't knock so hard, I am not deaf.' The noise continued, I opened the door. There was no one, and the house was asleep; the porter also said that no one had entered the house."

M. Lemonnier and M. Nivot then thought that their friend had died in the hospital. They went there and found that he had passed away at 5.45 exactly.

Miss Matthews woke in the middle of the night and saw, to her great alarm, a young girl, Suzanne, a housemaid like herself, who had left the house some months previously. "She was in night-attire, came straight to my bed, lifted the clothes, and lay down by my side. I felt a cold shiver, and I think I fainted. When I came to myself the apparition had gone; but I am sure it was no dream." The same night the son of Mr. Matthews who lived with his mother felt a great terror. He looked, but could see nothing, hid his head under the bedclothes and could not sleep. Suzanne, who was in hospital for liver trouble that did not seem very serious, died that night (*Tel. Halluc.*, 350).

Mrs. Beilby relates that she and her husband heard one day the voice of one of their young friends calling, "Johnny, Johnny." This young friend, Miss Snell, who was living in their house in Victoria (Australia) had gone for a ride, and had met with a serious accident about seven miles away. She had called out to Johnny for help, the boy who usually rode with her. The impression was so clear that Mr. and Mrs. Beilby called the servants (*Tel. Halluc.*, 363).

The Rev. Mr. Tweedale, of the Astronomical Society of London, on January 10, 1879, saw his grandmother in the middle of the night. The apparition lasted several seconds. She was wearing a cap of antiquated make. His father, Mr. Tweedale, also saw the same apparition at his bedside. The sister of Mr. Tweedale senior, eighteen miles away, saw the same apparition at 2

A.M., the hour being exactly noted. The vision of the Rev. Mr. Tweedale was at 2.10 A.M. The grandmother had died at 12.15 (*A. S. P.*, 1906, 610).

During the night in which X., a cousin of my children, poisoned himself with strychnine, my son George, aged twenty, and my daughter Louise, aged eighteen, told their impressions at breakfast. Said George, "I had a dismal dream. I dreamed that one of my friends had died. I hope it is not X. or Y. But it can't be either." "I, too," said Louise, "dreamed that our cousin P. A. was dead, and that I said to my brother Jacques, 'He cannot possibly be dead, you went with him to the opera.'" Now P. A. holds the same degree of relationship to my children as does X.; and X. had been to the theatre with Jacques on the previous evening.

Mrs. Young, taking tea with her husband and children, heard a violent noise on the floor above. She also seemed to feel a strong wind. Her husband heard and felt nothing. Far away, Mrs. Young's brother, Captain Adams, then at sea, heard himself called, "John, John," and knew his father's voice. He went on deck, but no one had called him. At that time Mr. Adams, their father, perished in a shipwreck (*Phantasms of the Living*, ii, 632).

(*b*) *Simultaneous and Collective Monitions*

Monitions of this group are of fundamental importance; first, because they strongly confirm the hypothesis of cryptesthesia, and secondly because they seem to show that in certain cases the monition assumes a normal objectivity, like a real materialization.

The following is an old story which may be considered exact in the main, despite the deformations that time often brings when the full details are not written down:

In the island of Cape Breton (Nova Scotia) Colonel Wynyard and Sir John Sherbrooke were dining in barracks, when a form, simply dressed, passed before them. "God bless my soul," said Sherbrooke, "who is that?" "It is my father, I am sure he is dead," Colonel Wynyard replied. The two officers verified that no one could have come in, and the occurrence was noted down in the regimental archives. Shortly after news came that Colonel Wynyard's father had been killed in the hunting-field.

Sir John Sherbrooke had never seen John Wynyard, but one day in London he met a man who strongly resembled him and was often mistaken for him. Sherbrooke said, "That is the man I saw" (*Tel. Halluc.*, 383).

Mrs. E. Wickham went daily to the hospital in Malta to visit an officer, Mr. B., wounded at Tel-el-Kebir. The wound became gangrenous and death was imminent; though not being expected that night, Mrs. Wickham consented to go home. About 3 A.M. her young son, aged nine, called her, crying out, "Mother, mother, here is Mr. B." Mrs. Wickham writes: "I got up in a hurry; the form of Mr. B. was floating in the room about six inches above the floor, and disappeared through the window, smiling at me. He was in night-attire, but the gangrened foot seemed to me like the other; both my boy and I remarked this. Half an hour later they came to tell me that B. had died (*Phantasms of the living;* quoted by Flammarion). This case is one of the most remarkable on record.

Several years ago, Mme. de Barreau, a lady of high character and serene disposition, told me a similar fact witnessed by herself. I unfortunately did not note it down at the time, but the story struck me so powerfully that the main facts can be relied on.

Mme. de Barreau was tending a girl friend who was very ill. The house was in the country and somewhat lonely, facing a meadow through which there ran a brook bordered by willows. The girl was dying and her mother and a professional nurse were with her. The sick-room was on the ground floor, that of Mme. de Barreau on the first story. One night, after watching some time, Mme. de Barreau and the nurse went upstairs to take some rest, and some time later both of them, looking out of the window, saw a white form float among the trees and vanish into the darkness. Just then the death took place.

Mrs. Pearson and her sister, Mrs. Coppinger, were watching at the bedside of their dying aunt, Mrs. Harriet. Suddenly Mrs. Coppinger said, "Look, Emma, there is Aunt Anna." The two sisters than saw a little old woman wearing a shawl and an old-fashioned hat entering the sick-room. This Aunt Anna was a deceased sister; before her death Mrs. Harriet said that she had seen this sister who came to call her (Bozzano, *A. S. P.*, 1906, 164).

Commander Aylesbury, being then a boy of thirteen, narrowly

escaped drowning and in his distress called loudly on his mother. On the same day at a distance of some 6,000 miles (Batavia to London) his mother and three sisters were working in their room. All heard a faint cry, "Mother!" The girls said, "Did you hear? Some one cried 'Mother!'" The voice called twice more, quickly and as if in distress. They got up and ran out into the street. All was quiet and the weather very calm. Mrs. Aylesbury noted the date in her diary. The time corresponded, so far as can be judged after thirty years and in the absence of other written confirmation (*Tel. Halluc.*, 365).

In October, 1916, Mme. R., of Montluçon, heard a cry of distress, "Mother." She hurried to her boy's room and found that he also had been startled by the same cry very clearly heard. Two days later they learned that another son had been wounded that night (Unpublished, M. Mialaret).

Mrs. P., before going to bed, saw a man in a naval uniform, with his elbow on the foot-rail of the bed, looking at her husband who was sleeping. Mrs. P. woke her husband, who saw the apparition, and cried out in astonishment, "Sir, what are you doing here?" The form stood up and said, "Willy, Willy," in an imperious voice. This was Mr. P.'s Christian name. He got up to eject the stranger, but the form moved impassively across the room, throwing a shadow on the wall (there being light in the room), and disappeared through the partition. The door was bolted. Mr. P. recognized his father who had been a naval officer in his youth, whom Mrs. P. did not know. Mr. P. died shortly after (Bozzano, *A. S. P.*, 1909, xix, 326).

Mrs. Bettany dreamt that one of her neighbors, Mrs. J., whom she knew by name only, and who was not ill, had died. The dream was so clear that she sent next morning to enquire for Mrs. J., and found that she had really died during the night. One of Mrs. Bettany's servants also had a terrible dream that night in which some one told her that Mrs. J. was dead.

The following case is interesting from several points of view. M. Sully-Prudhomme and I were able to gather all the authenticating documents. Captain Mangot, commanding the three-master *Jacques Gabriel,* outward bound, Bordeaux to Mauritius, notes in the ship's log, July 17, 1852, that he and his second officer, M. Pénaud, walking on the poop, heard a woman's voice. The steersman also heard it. He says, "On arriving at Mauritius

we heard of the death of M. Pénaud's wife, who died on the same day and hour at which the voice was heard. M. Pénaud told me that he had had a presentiment of misfortune, adding that each time he had lost one of his family a similar warning had occurred." Later on the captain added that the cry he had heard was heart-rending, and the fact impressed him so much that he often spoke of it.

The ship left Bordeaux on April 16th, and the death of Mme. Pénaud took place, not on the 17th of July, but on the 16th of June, according to the register of deaths at Paimbœuf. There is, therefore, a manifest error in the statement of dates in the log-book. The voice was not heard on the day of the death, but a month later. Still, the fact remains that a woman's voice, strong and clear, was heard by three persons on a ship at sea.

Mr. Falkinburg, returning home at 7 P.M., was playing with his little boy aged five, when suddenly the child exclaimed, "Papa, here is grandpapa." Mr. Falkinburg came and saw the very lifelike figure of his father. Mrs. Falkinburg, however, could see nothing, and tried to persuade her husband that it must be an illusion. At ten o'clock, the child, then in his bed, called again, "Papa, grandpapa is here." Mr. Falkinburg had died at 7.14 exactly.

This monition though collective cannot be objective, since it was invisible to the third person present. It is open to question whether collective monitions seen by several persons have really the objectivity that they would seem to have, using the word "objectivity" in its usual sense.

Mme. Focke at Düsseldorf, was taking tea with her daughters, when she heard a cry, "Mother, Mother!" Her daughters and Mme. Haskel, who was with her, heard the same cry, and the voice was recognized as that of Anna Focke, another daughter. They went to the window but could see no one. Anna Focke had embarked for the Indies on a Dutch boat which was lost that night with all hands (*Phantasms of the Living*).

Professor Knes and Dr. Obersteiner, well-known physicians of Vienna, were together at the house of the latter, and heard a knock at the door. They cried, "Come in," but no one entered. A few moments later they heard the door of the antechamber open, and some footsteps, light, but distinct. Obersteiner opened the door but saw no one. A third time they heard the further

door opening, the light footsteps and the knock on their door, and Dr. Obersteiner exclaimed, "This is really too much!" At that time Mme. S., the sick lady whom they were going to see in consultation, was dying. She had died when they reached the house (*A. S. P.*, 1891, i, 162).

Mme. B., at the bedside of her dying mother, saw the phantom of her godmother, an old governess long since dead, sitting by the fire in her mother's usual place. She gave a cry, her sister came, she and three other persons saw the phantom (Bozzano, *A. S. P.*, 1906, 166).

One night, Mrs. L., sleeping at her husband's side, heard clearly the voice of their son. Both woke up completely. The voice said, "As I cannot come home to England, mother, I am come to see you." They took note of the incident and some days later learned of their son's death (*Tel. Halluc.*, 364).

Maria Strieffert, schoolmistress, heard distinctly the word "Fraulein." Two pupils with her also heard it. She knew it for the voice of a person who had behaved badly to her. Having noted the time, it was verified that this person had died at that moment. The case is not very evidential (Flammarion, 323).

Mme. Telechoff was in her sitting-room in Petersburg with her five children and her dog *Moustache*. The dog suddenly began to bark, and all present then saw a small boy about six years old, dressed in a shirt, whom they recognized as the child of the milkwoman. They knew this child to be ill. The apparition left the stove, passed over the heads of the persons present, and disappeared by the open window after lasting about fifteen seconds. The dog followed its movements, barking all the while. The child died at the same hour (*A. S. P.*, 1905, xv, 439).

Philip Weld, a boy of fifteen, was accidentally drowned on April 16, 1845. Mr. Cox, the master of his school, went to the boy's father to give the sad news personally; but as soon as he entered, Mr. Weld said, "You need not tell me, I know that Philip is dead. My daughter Catherine and I saw him on the road, and by him a young man dressed in black. I could see, through their forms, a peasant working in the fields. I have said nothing about it so as not to alarm my wife" (*Tel. Halluc.*, 376).

Mme. Obalecheff, at Odessa, was lying in bed with her infant; her servant Claudine was sleeping on a mattress beside her on

the floor. Raising her eyes she saw her father-in-law slowly enter, wearing bedroom slippers and a plaid pattern dressing-gown that Mme. Obalecheff had never seen. He stepped over the feet of the servant and sat down in an armchair. The clock struck eleven. "Being quite sure that I was looking at my father-in-law, I said to the servant, 'Look, Claudine, I do not know him.' Claudine, trembling with fright, said, 'I see Nicolas Nilovitch' (my father-in-law's name). He then got up, again stepped over the servant's feet, and vanished." The lady went to call her husband; they went through the flat but found no one. Mr. Nilovitch died at Yver at that time (Flammarion, 194).

Mrs. Paget was at prayers with her daughters one evening about 11 P.M. when the three of them heard the heavy steps of a man in the passage. The steps stopped at the end of the corridor where there was a gas-jet, and then went away. Mrs. Paget opened the door, and said, "He has not put out the gas; how his step resembled that of poor Arthur!" This Arthur was an old and faithful servant whom Mrs. Paget had sent to Ventnor for a rest. She knew him to be ill, but thought him in no immediate danger. Before hearing the steps, Mrs. Paget had remarked, "Since poor Arthur has left us no one has put out the gas punctually." The incident was noted in a diary, and it was proved that no one had entered the passage. Arthur died at Ventnor at the precise time, carefully verified. Just prior to death he asked the time, and one witness affirms that he said, "It is time to put out the gas"; but this is not perfectly certain.

Mme. Weyer and her husband both heard one night three distinct sobs, like those of a dying person. He got up, lit a candle, and sought for the cause of the sound. They went to bed again and the sobbing was repeated. The time was noted as 10.30. There was no recognition, but Mme. Weyer's brother died at the same hour.

Mrs. Elgee, staying in Cairo, slept in a large room of the hotel, having carefully barricaded her door. One night she woke suddenly, as if she had been called, and saw the form of an old friend whom she knew to be in England. "How did you come here?" she asked in astonishment. The form was so distinct that she could see all details of the dress down to three onyx shirt-studs. He came forward and pointed to Mrs. Dennys, who was sleeping in the same room. She woke up and looked at the apparition in great terror. The form then vanished. Mrs.

Dennys was able to describe the vision exactly, but did not recognize it. The person seen by both ladies with all the appearance of life was a Mr. X., who was neither ill nor in danger. Mrs. Elgee met him four years later.

Mrs. Lett entered one of the rooms of her father's house, accompanied by a young girl, Miss Berthon. The gas was alight, and both saw the figure of Mrs. Lett's father, Captain Towns, reflected on the polished surface of a wardrobe. It looked like a life-size portrait. The face was pale and thin, and he seemed to be wearing the grey flannel jacket in which he used habitually to sleep. There was no portrait on the walls. While they continued to look stupefied at this image, another daughter of Captain Towns entered and said, "Why, good God, it is father!" A housemaid also came and said, "It is the master." Graham, the captain's orderly, came, and said, "Lord save us, Mrs. Lett, it is the captain!" They called the steward and Mrs. Crane, and both said that they saw the captain. Then Mrs. Towns, the captain's widow, was called, who, seeing the apparition, put out her hand to touch it; as she passed her hand over the panel the image gradually disappeared.

Dr. Isnard, the son of the well-known military surgeon, who was professor at the Val-de-Grace, while still a medical student, had a vision of a phantom, perceived also by his sister and a friend at the same time. His mother, Mme. Isnard, being then a widow, was seriously ill and had been bedridden for four months in her house in the Rue Jacob at Paris, in 1878. Her bedroom was next to the dining-room. Suddenly the door into the passage opened wide. A gust of wind was felt though all the windows were shut. In the doorway there appeared the shade of a woman of small stature, bent, with bowed head and arms crossed on her breast. She seemed to be wearing a grey and dusty veil. She advanced gently into the room, gliding over the floor and her face could not be seen. She passed close to us, turned by the door and disappeared in the darkness of the passage-way. Mlle. Isnard and M. Menou Cornuet saw exactly the same phantom. Mme. Isnard died a few days later (*A. S. P.*, 1891, 193-203).

The very circumstantial evidence given by the three witnesses, none of them at all superstitious, makes it clear that no illusion was possible. This is one of the best cases of collective vision; and its full force can scarcely be realized without reading the

whole evidence and the judicious notes that Dariex has added upon them.

To establish the objectivity of a phantom perhaps the best proof, apart from photography, would be the effect on animals. On this there are valuable evidences, collected with much care by Bozzano, who has brought together sixty-nine cases, mostly gathered from the Proceedings and Journals of the S. P. R. After eliminating the stories of phantasmal animals and haunted localities (a very doubtful matter pertaining to haunted houses), there remain thirty-five cases of cryptesthetic perceptions by animals, though the evidential weight to be attached to them is not very great.[1]

Mme. T., visiting M. and Mme. Yver, was conversing with them on the subject of one of Mme. T.'s relations who had committed suicide. A little terrier at Mme. T.'s feet began to whine and tried to rush to the door; his hair stood up and he tried to escape from his master's hands as if to attack some one. Mme. T., but only she, saw a phantom before the door which she alleged that she recognized as the form of the suicide.

Miss H. E. S., aged eighteen, having risen one summer morning at five o'clock, was lighting the fire to prepare tea, when a big dog with her began to growl and look towards the door. Miss S. then saw a tall, dark figure with shining eyes, that soon disappeared.

Miss K. was petting her kitten on her knees when the animal suddenly showed disquiet, hissed, arched its back, giving all the signs of terror. Miss K. then saw in a chair near her an old hag, ugly and wrinkled, looking maliciously at her. The cat rushed against the door, and Miss K., terrified, called for help. Her mother came, but the phantom had vanished. It had been visible to Miss K. for about five minutes. As soon as the door was opened the cat had fled through. It seems that formerly an old woman had hanged herself in that room.

[1]To these facts of telekinesis should be added some that may be considered as monitions. Professor Bozzano has published a most interesting article, *Dei fenomeni di telekinazia in rapporto con eventi di Morte* (*Luce e Ombra*, 1922, 375; 1922, 13). Twenty-five cases are reported of which some are very striking. Myers has mentioned some of these in his *Human Personality*. They resemble some cases on which Flammarion has dwelt—apparitions of the dead to the dying. These monitory and premonitory telekineses and hallucinations should be noted. They do not simplify the problems, but demonstrate once more the mysteries that surround our psychological and physiological life. (Second French edition.)

If it is difficult to admit that collective hallucinations, perceived in common by several persons, are purely objective, it is much more difficult to admit this when animals show perception of an external reality of some kind or other. As Bozzano well says, the signs of fear or anger shown by cats and dogs do not prove that they see the same phantom that is seen by human beings. All the same, they do see *something,* and this unusual something frightens them.

It is not unlikely that if in such cases a photograph could be taken there might be an image on the plate. This proof would be much more evidential for the objectivity of the phenomenon than the terror of a dog, cat, or horse, which is difficult to verify, still more difficult to analyze, and almost impossible to interpret.

Conclusions

It cannot be supposed that these forms, noises, and phantoms that several persons can see have no mechanical objectivity; and yet rigid and unquestionable proof is lacking. As in all the sciences that depend on observation, the accuracy of the observations is open to question.

Given the strange nature of the phenomena and the consequent need for rigorous demonstration, if we had to depend solely upon collective hallucinations to determine the reality of materialized phantoms we could not venture on a conclusion. But the *experiments* on materializations are so evidential that they reinforce the observations. On the basis of experimental fact given by materializations (to be studied in detail later on), it may be positively asserted that some collective hallucinations are objective phenomena in the ordinary sense of the word.

Observational methods are not as precise as experimental methods. Cameras, microphones, balances, and galvanometers are not available. The only proof that can be given of a true materialization with mechanical and visible reality, is that the phenomenon has been perceived at the same time and with the same details by several persons. It is highly improbable that two persons should have the same hallucination at the same moment, their good faith and intellectual honesty being admitted, and in the absence of any external suggestion.

A photograph would, of course, carry scientific certainty; but when two reasonable and normal persons describe the same form,

exclaim at the same moment, and utter their impressions even while the apparition is still there it would be absurd to suppose an identical wholly subjective hallucination.

When Mr. Weld and his daughter both see Philip Weld walking on the road it is difficult to suppose that no phantom was there. Mr. and Mrs. Beilby both hear Miss Snell call "Johnny, Johnny," and the servants also hear the same voice; it is almost self-evident that there were sonorous vibrations of the air that could have been recorded by a phonograph. When Mrs. Aylesbury and her three daughters hear the cry, "Mother, Mother!" how can this be understood unless the air really conveyed those sounds? The two sons see the form of their father in their cabin, and both their accounts tally, even though at second-hand. How can this concurrent testimony be explained unless there were some single objectification?

These collective hallucinations are often monitory, and might be so classified. But certain cases show no lucidity in the percipients, and no recognition; it is just a phantom that some persons have seen and described without connecting it with any external event. The meaning, if any, has not been understood.

Such occurrences can hardly be called monitions; they convey no warning and involve no recognition. Such collective visions belong rather to the chapter on the uncertain and imperfectly studied phenomena of haunted houses.

They constitute a transitional class between metapsychic subjectivity and objectivity.

Collective hallucinations confirm what has already been so often reiterated—that there is a special sensibility perhaps common to all men but certainly existing in some individuals, which conveys notions by other means than the normal senses.

But for this sensibility to come into play there must necessarily be some external radiation; some power hidden in things or in the human soul which finds out the percipient and sets some tracts of his subconsciousness in motion.

We can state nothing as yet either on the nature of such forces or on the modes of the sensibility by which they act, and therefore we must abstain from theorizing.

Nor does this greatly matter! We have no warrant to deny a phenomenon because we do not know its laws. If that were the case we should have to close all scientific books.

CHAPTER VII

Premonitions

1. *On Premonitions in General*

We now approach the thorny problem of premonitory cryptesthesia. We may be just able to conceive of extremely piercing sight, or super-acuity of hearing, a sensitiveness to vibrations hidden in things, or the influence of one brain on another, but what are we to say on a knowledge of what is yet to come? Nevertheless, it seems to me that there are numerous and indisputable cases of lucidity that involve a knowledge of future events. Bozzano, who has published an excellent book on premonitions, says, with good reason, that among all the phenomena of lucidity, premonition is the one that has been most effectively proved.

If the long-continued belief of men in all lands and in all times had any scientific value, divination of the future might be reckoned as one of the most positive facts in metapsychics.

But we can definitely affirm the reality of premonitions, not because all ancient writers, whether credulous or not, believed in it, but because many testimonies to it have been obtained in our own day. Oracles were given by the augurs, the sibyls, and the priestesses of Cumæ and Delphi; Socrates had a dæmon who warned him of dangers by a voice that he distinctly heard. Cicero has written a whole book on divination, but does not discuss whether it exists or not; he descants on its advantages and errors, and he seems to conclude on a fatalistic note, saying it is better to be ignorant of coming evils: *ignoratio futurorum malorum utiliorquam scientia est.*

We shall not discuss whether a knowledge of the future is or is not desirable, but shall only examine whether it is possible.

At the outset it may be shown that prevision of the future is not so absurd as to warrant rejection *a priori.*

Let us imagine a man on a high mountain with a first-rate astro-

nomical telescope which shows every detail on the plains. He sees a railway, and at the exit of a tunnel some villains placing a huge stone on the rails. It is 10 A.M., and the train is due there at noon. He knows that B. will travel first class in that train, and he sees the train in the station, and B. entering a first-class carriage in the forepart of the train. He foresees the accident as a result of his momentary vision, and notes down, "In two hours B. will be in a terrible railway accident." Suppose the means whereby this knowledge came to him is then effaced from his memory; he will then have a premonition of the future without knowing how he came to have it.

If we knew the totality of things in the present we should know the totality of things to come. Our ignorance of the future is the result of our ignorance of the present.

Laplace, in his *Analytical Essay on Probabilities,* has said this in precise terms: "An intelligence knowing all the forces of Nature and the respective positions of all beings in it, having also the power of analyzing all the data, would comprehend under one formula the movements of vast masses and of the smallest atoms. Nothing would be uncertain, and the future would be as open to it as the present."

Every future event of whatever kind is the consequence, perhaps the *inevitable* consequence, of the actual state of things. The present is pregnant of the future, for the future is dependent upon the present. Now, cryptesthesia gives cognitions of realities, even of far-distant realities. We are subconsciously moved by complex vibrations that bring to us complex notions to which our normal psychological life is closed; so that the subconscious knowledge of the present may permit of a rapid perception of its consequences; that is, of things to come.

There is a curious, though very rare, medical fact which enables us to form an idea of what a premonition may be. A photograph taken of a person suffering from a slight attack of fever may show signs of a rash or eruption on the face quite invisible to ordinary sight. The eruption may then be foreseen.

These are but analogies, and scarcely lessen the enormous difficulties of our inability to comprehend the facts. Whatever sketchy theories we may make to explain premonition, they will always be fragile and imperfect; and I shall not dwell on this mystery but shall content myself with showing that premonition is an existing fact. That is all that present science can do.

To permit of our speaking of premonition in the metapsychic sense of the word, three conditions must prevail:

(1) The fact announced must be absolutely independent of the person to whom the premonition has come.

For instance, many cases are known in which A., in a somnambulistic state, announces that he will have some illness, say a syncope, after ten days, a month, or even a year. This is not a metapsychic premonition, for A.'s subconsciousness is fully awake, and is quite able to act on the internal organs and so to bring about the crisis at the predicted time. Such cases belong to hypnotic auto-suggestion.

(2) The announcement must be such that it cannot be ascribed to chance nor to sagacity.

The range of the latter is difficult to determine. An acute mind in possession of the exact facts can to some degree foresee the future event. In an academical election, for instance, he may say, "X. will be elected, and not Y., for M. and N. will both vote for him. O. will not vote, and though Y. counts on M., N., and O., he will have three votes less than he counts on. X. will have 21 votes and Y. only 17." This is only shrewdness. So if a young man is seen to enter a gambling house with two hundred-franc notes it might be said, "In an hour that young man will be cleaned out."

But the predictions of shrewdness, however acute, are not *necessarily* correct. Y. may be elected in spite of A.'s correct calculations; the young man may possibly win. Genuine premonitions are not due to shrewdness; they are often concerned with minute details that no sagacity could foresee and no chance could account for.

Before we can admit a metapsychic premonition, chance must be completely eliminated.

A. goes to Monte Carlo and, looking at the roulette-table, says, "Red will come up." The probability is 1 : 2, and if he is right the result is, of course, one of two probabilities. If he says, "7 will come up," and again is right, the probability is 1 : 37. But gamesters often have such anticipations which prove correct and they are blind enough to forget the thirty-six cases in which the anticipation failed.

Every alleged premonition is a special case to be studied and analyzed in full detail to eliminate auto-suggestion, perspicacity, and chance.

To show how chance may intervene I will quote the following personal fact which I do not in the least imagine to be a premonition, but consider entirely fortuitous: On the 20th of May, 1918, I was in Paris, and being about to start for the ambulances at the front, I wrote in my pocket diary under the dates May 20th and September 24th, "Finis belli."

On the 20th of May no perspicacity could foresee the end of the war. To all appearances, and my own opinion was in agreement, the war would last another year; but on the 24th of September the Bulgarian armistice was signed, and that date is nearly as important with regard to the end of the war as November 11, 1918, when the general armistice took effect.

If the calculus of probabilities be applied to the above, from the 20th of May, 1918, to the same date a year later, there are 360 days, and since two dates are specified we may put the odds against one of them being right as 2 : 360 or 1 : 180, a probability fairly comparable to that of predicting that first the ace of hearts and then a club would be drawn from a pack of cards, 1/52 x ¼, say, 1/208. I have no notion why I wrote "Finis belli" under September 24th. I never but once made any similar forecast, and that turned out wrong. It would be absurd to consider this a premonition; it is a mere coincidence, curious enough but fortuitous.

I think that Dr. Conan Doyle's *Piave,* to which I shall allude further on, is similarly fortuitous.

(3) The conditions under which the alleged fact has been received and noted down must be examined with the greatest care. Paramnesia—false memory—that leads a person to imagine in all good faith that the event or the landscape that he sees is not *new* to his eyes, plays strange parts and is sometimes so strong as to lead a person to affirm a premonition when there has been none.

The only answer to this serious objection is that before the alleged prediction is realized it should have been written down, or circumstantially told to two or three persons. If an exact register were kept of dreams supposed to be premonitory, it would be possible to compare the number of those that were verified with those that were not. Several investigators have suggested classifications for premonitions—e.g., Mrs. Sidgwick, F. W. H. Myers, and Bozzano.

Mrs. Sidgwick classes them according to subjective modalities:

Myers on an ascending scale of theoretical import. I shall here follow the classification adopted in previous chapters for monitions; giving, however, one separate section to auto-premonitions, which are subject to some reserves, inasmuch as they may sometimes be explained as being due to auto-suggestion.

The classification to be followed will then be:

Auto-premonition, (a) of sickness, (b) of accidental death:

Real premonitions, (a) under hypnotism, (b) under spiritist conditions, (c) casual premonitions of various kinds.

2. *Auto-Premonitions*

(a) Of Sickness

Of all kinds of premonitions these are the most questionable, for there is nothing to prove that an act of will—I may even say of unconscious will (paradoxical though the words may be)—does not bring about the event. For instance, the case in which a magnetizer suggested a crisis to supervene after 6,666 minutes. The subject, on waking up, had no remembrance of the suggestion, but the crisis occurred as suggested.

The following case is taken from Dr. Teste's *Manuel pratique de magnétisme animal,* p. 140. Mme. M., being pregnant, announced on May 8th that she would have a fright on the 12th, and a fall that would have serious though not fatal results. On the 12th, in magnetic sleep, she repeated the prediction, which was completely forgotten on waking, and she was astonished when her husband, fearing the consequences, forbade her going out. She went to her room and gave a cry of fright. A rat ran across the room and the fright caused her to fall, bringing on a miscarriage.

The fact is thoroughly authenticated, but no deduction can be made, for it may be supposed that if the rat had not been there, some other cause would have produced the result.

Denise Blanche, aged eighteen, in blooming health, and belonging to a very honourable family at Aramon (Gard) pressed her parents to have her portrait taken, saying that she had not long to live. There was no reason for the apprehension. One day while she was in the house, there was an alarm of fire. Alongside of the house, separated by a small yard, there was a basket factory which had caught fire, though the damage done was unimportant. Denise was much frightened, felt a vague illness,

and died in two months, the actual nature of the disease being indeterminate (communicated by Mr. F. of Aramon).

I cite this case of auto-premonition (which is not evidential), to show that such cases might well be called pseudo-premonitions.

Mme. Clary, very ill (of tuberculosis, doubtless), on being put to sleep by Dr. Teste on the 15th of May, said that she would have high fever on the 2d and 3d of June. Asked, "And on the 4th?" she replied, "I see no more." She died on the 4th of June. There is no need to insist further; such facts prove nothing.

The artist Giovanni Segantini was painting an allegorical picture representing death—a cottage on a snow-covered plain, and a coffin in front of the cottage. One day he dreamed that he saw himself in the coffin and told this dream to his wife. Some days later he had acute peritonitis and died thirteen days after the vision. The circumstances at the funeral at the cottage of Maloja reproduced precisely those of the vision. This also is a pseudo-premonition, for he may have vaguely felt some morbid symptoms that no doctor could foresee.

Similarly the gruesome dream of Earl Hartington, who, while in good health, dreamed of a skeleton looking at him which raised the coverlet and slipped between him and his wife. He died fifteen days after.

The cases next following are taken from Bozzano's book, unless otherwise signified; the roman numbers being Bozzano's.

The reservations applicable to all auto-premonitions should be maintained for that of Mrs. X., carefully analyzed by R. Hodgson. She saw in a dream on March 5th her father, who had been dead eleven years: he showed her a calendar displaying the date, March 22d. Mrs. X. was near her confinement, and thought that the dream meant that she would be delivered on that date. The confinement took place on the 12th, and her family jested on her simplicity in believing prophetic dreams. The confinement was normal, but she died of meningitis on the 22d of March.

Auto-premonitions of organic phenomena are pseudo-premonitions, and may be referred to autoscopic cognitions, non-metapsychic, produced by the subconsciousness.

Mrs. S., married two years and a half, was distressed at having no child. The planchette gave her, "In six months your hopes will be realized. Happiness to all three." At the end of six months she found herself *enceinte*. It must be added that Mrs. S. had had several interesting premonitory dreams.

Without minimizing the interest of this story, there may have been subconscious organic perceptions reaching the subliminal consciousness. This explanation is not very satisfying, but neither is the hypothesis of chance, and the spiritist explanation is still less so.

Bozzano's sixth case may perhaps be explained by subconscious organic sensations. Mrs. Norris was in good health. One night she had a terrifying dream, which she told to her daughter and to Dr. Lyon, her son-in-law. She dreamed that a friend long dead, Mrs. Carleton, said to her, "Your end is near; you will die tomorrow morning at the same hour that you have seen me tonight." Mrs. Norris ordered a bath to be prepared so that her corpse need not be washed, and died at the hour indicated.

Flammarion, in his book *Death and Its Mystery,* reports several significant cases of auto-premonitions that I cannot reproduce here.

M. Féron, a lawyer of Cherbourg, dreamed that he would not see the end of January. He told this and repeated it. He was quite well to all appearance, but died suddenly on January 18th.

Edward Reed, director of the Natural History Museum at Concepción (Chile), dreamed that he saw a grave and cross, with the inscription, "Reed, Nov. 7, 1910," and he told the dream jestingly to several persons. He died on the date mentioned.

Preferring rationalist explanations, I refer all these cases to subconscious sensations which give vague warnings to the nervous centres of a defective state in one or other of the vital organs.

The following case of auto-premonition of sickness and death is remarkable for the precision of its details. The story is so dramatic that it would be open to some suspicion had the details not been minutely checked by Dr. Geley (*A. S. P.,* 1916, xxvi, 125-129).

The case is that of M. Dencausse, the father of Mme. Freya, whose lucidity has already been alluded to. In May, 1916, M. Dencausse, then aged seventy-six, and in fairly good health, announced that he would die before winter. He was getting thinner and his nutrition was defective. Towards October 24th he declared that he would die on All Saints' Day. On October 28th, Dr. Geley, who was called, found no organic lesion, no fever, and very slight bronchitis. M. Dencausse then declared that he would die on the stroke of midnight on All Saints' Day without suffering.

On Monday the 30th he was going on well, but on Tuesday pneumonia set in with some fever. On November 1st he was weaker, but could speak and give his last instructions. About 11.30 P.M. he asked his wife, "What is the time?" Mrs. D., to mislead him, said, "Two o'clock in the morning." The sick man replied, "No, it is not yet midnight. I shall die at midnight." Close on the hour he turned to the wall. They came to him and the clock struck; without speaking he raised his hand, pointed to the clock, and expired.

Dr. Geley has noted that Mme. Freya told him her father's predictions from day to day.

A very distinct auto-premonition of death has been related by Dr. W. de Sermyn.[1]

Jean Vitalis, aged thirty-nine, a strong and vigorous man, was seized by acute rheumatic arthritis. On the sixteenth day of his illness, Dr. de Sermyn who was attending him found him sitting up in bed, smiling and half-way to recovery. Nevertheless, Vitalis said to him, "I have had a vision; my father, who died some years ago, has been to visit me saying that I ought to receive extreme unction; for no doubt he wants me and will come to take me at nine this evening." All day he was well, pain had disappeared, his temperature was normal, and he ate with appetite. He received the unction for the dying, to the great astonishment of the priest. Dr. de Sermyn saw him at 8 P.M., he was in good spirits, laughing and talking with those about him. At one minute to nine he got up from the sofa where he was sitting; said, "The hour is come," jumped on to his bed, arranged the pillows, bent his head, saying, "Good-bye, good-bye," stretched himself out and ceased to move, dying without a gasp or a sigh.

These organic subconsciousnesses sometimes assume the form of an exterior hallucination. Dr. Minot Savage tells the story (Flammarion, *loc. cit.*, 99) of a student in New York who saw a spirit appear and walk beside him in the street. He thought he would die soon, and told his mother who tried to reassure him. Three days later he had appendicitis, was operated on, and died.

It is, however, impossible to suppose organic subconsciousness when the premonition takes place seventy years before the event. Mr. Banister, then a schoolboy, dreamed about the year 1813 that he saw on a gravestone his own name with date of his

[1] *Contribution à l'étude de certaines facultés cérébrales méconnues,* Lausanne, Payot, 1911, 13-16.

birth and death, the latter being Jun. 9th. Was it, however Jun., which is an unusual abbreviation for June, or was it Jan., for January? On the 9th of June, 1835, his eldest son died. He was then persuaded that the inscription must have read June 9th; but in fact Mr. Banister died on the 9th of January, 1883.

This is a strange fact among many strange facts, and it seems even fantastic, but it is well authenticated. I cannot, however, advance any explanation that would not be absurd.

Again, I shall now quote two more facts still more strange. They would be curious and remarkable if each stood alone. But they do not stand alone, and the resemblance between them, or rather their identity in essentials, makes chance or fantastical imagination alike untenable as an explanation.

The first of these (Bozzano's No. vii), refers to a child of two years and seven months (1883), named Ray. A baby brother of Ray's had lately died. Little Ray had repeated visions; he constantly saw his brother sitting on a chair and calling him. "Mother," he said, "the little brother calls Ray; he wants him with him." Another day he said, "Don't cry, the little brother smiles at Ray. Ray is going to him." The child's intelligence was much above that usual to his age. He died two months and seven days after the death of his brother. No one can doubt that he had some kind of premonitory vision; and this is the more extraordinary as that at his age he could not have understood the meaning of death. The second case (unpublished) seems almost modelled on Ray's case.

Louise F., aged forty-eight, died after an abdominal operation in January, 1896. During her illness she frequently asked that, when cured, she might take her little niece Lily, aged three years and three months, of whom she was very fond, to live with her in the country. About a month after the death of her aunt, little Lily who was intelligent and precocious and in quite good health, often stopped in her play to look fixedly out of the window. Her mother asked her what she was looking at, and she answered, "It is Aunt Louise, who holds out her arms to me and calls me." Her mother, much frightened, tried to distract her attention, but the child drew her chair to the window and continued to look for several minutes. Her brother, M. F., who gave me these details, said, "I was then eleven years old and my little sister said, 'What! Don't you see Tata?' as she called her aunt. Of course I could see nothing." For some months nothing further was seen by

the child, the visions ceased. Towards May 20th, little Lily fell ill, and when in bed she looked up to the ceiling saying that she saw her aunt calling her, surrounded by little angels. "Mother, how pretty!" she said. From day to day her illness increased, but she always repeated, "My aunt has come to fetch me; she is holding out her arms to me," and as her mother wept, she said, "Don't cry, mother, it is very beautiful, there are angels round me."

She died on the 9th of June of tubercular meningitis four and a half months after the death of Louise F.

Such is the story told me by M. F., her brother, confirmed by his sister G. F., and her mother. The family lived very quietly in a country town. None of them know any English or anything of psychic science.

I give the story as it came to me, without attempting any explanation. A somewhat similar fact is given by Stainton Moses (*Luce e Ombra,* xx, 1920, 19). Miss H., the daughter of an English clergyman, was tending a dying child. His little brother, aged three to four years, was in a little bed in the same room. As the former was dying, the child woke up, and, pointing to the ceiling with every expression of joy, said, "Mother, look at the beautiful ladies round my brother! How lovely they are, they want to take him." The child died at that moment.

Another instance is reported by M. Pelusi, librarian at the Victor Emmanuel Library at Rome (*Luce e Ombra,* 1920, 20). A little girl of three, Hippolyte Notari, partly paralyzed, was in the same room with her little brother of four months, who was dying. The father, the mother, and the grandmother of the two children were present. About fifteen minutes before the death of the infant, little Hippolyte stretched out her arms, saying, "Look, mother, Aunt Olga." This Aunt Olga was a younger sister of Mme. Notari who had killed herself a year previously owing to a disappointment in love. The parents asked, "Where do you see Aunt Olga?" The child said, "There, there," and tried insistently to get out of bed to go to her aunt. They let her get up, she ran to an empty chair, and was much *discountenanced,* because the vision had moved to another part of the room. The child turned round and said, pointing to a corner, "Aunt Olga is there." Then she became quiet and the baby died.

Facts of this kind are very important. They are much more explicable on the spiritist theory than by the hypothesis of mere

cryptesthesia. Among all the facts adduced to prove survival, these even seem to me to be the most disquieting. I have therefore thought it a duty to be scrupulous in mentioning them. But in despite of their spiritoid nature, they are insufficient to make me believe that the consciousness of the deceased persons is present as a phantom at the death of their relatives. (! ! !)

Bozzano's cases, ix and x, do not seem to me worth record; for an announcement of death to occur five years later is too vague to have much value.

(b) Auto-Premonitions of Accidental Death

No effect of organic subconsciousness can be invoked in such cases: they are clearly metapsychic premonitions.

There are a dozen or so of these that are too ancient for criticism or for any inferences from them (*A. S. P.*, 1898, vii, 316).

Mr. D. (Bozzano's case xiii), dreamed that he was in an inn where he met several friends, all of them being deceased persons. They made him promise to return in six weeks. When he woke up, Mr. D. told the dream, joking over it. Exactly six weeks later he was riding and met his death in an accident.

If this case stood alone it would be reasonable to refer it to chance, and this may always be done; but there are too many such cases for the inference that chance plays so great a part in our lives. Chance is the god of the ignorant.

Armand Carrel saw in a dream his mother clad in mourning, and weeping. "I weep for you, my son," she said. On the day following this dream Armand Carrel wrote for the *National* the famous article that resulted in the duel with Emile de Girardin in which he was killed. No premonitory value can be attached to this dream, for Armand Carrel must have known that the article he had under contemplation would involve peril.

The following case, though not quite an auto-premonition, is akin thereto, for it is of a doctor who foresaw the death of his child. Possibly certain signs reaching his subconsciousness led to the prognosis (?).

Dr. de Sermyn saw, in a dream, his child of four fall into a stove and burn to death. He woke up, went to his child's room, and found him sleeping peacefully. "Thank God," he said, "it is only a dream." In the morning the child was still in good health, but at noon he was very feverish. Haunted by the dream, Dr. de S. knew that his child was lost to him. A colleague called

in by him thought the illness not serious; but it grew worse from hour to hour, developed into broncho-pneumonia, and the child died on the fourth day.

In this, as in many cases of monition, I am inclined to think, with Myers and Bozzano, that the phenomena are of a metapsychic order; but rigorous proof is impossible.

Dr. von Gudden (case xv), before leaving for the castle of Hochenswangen, dreamed that he was drowning and struggling with someone in the water. He told the dream to his wife. Some days later his body was found in the lake, drowned along with King Louis of Bavaria. The premonition here is obvious.

It is still more so in case xviii, one of the most striking.

In 1895 M. Lukawski, of Petersburg, who was an official at the Ministry of the Marine (which does not at all imply his going to sea), dreamed that he was on board a ship, that there was a collision, that he fell into the water with another passenger and was drowned. From that moment he was convinced that he would die by shipwreck, and put his affairs in order. However, after some months, when the remembrance of the dream had faded, he received the order to leave for a port on the Black Sea. This recalled his dream, and before leaving he said to his wife, "You will see me no more; when you hear of my death put on mourning, but not that black veil which I dislike so much." Two weeks later the *Vladimir*, on which he was travelling, collided with another vessel and M. Lukawski was drowned. Another passenger, M. Henicke, who escaped, says that he and M. Lukawski were for a short time holding on to the same life-buoy.

Mme. Dudlay, of the Comédie Française, tells of a spiritualist séance in which Irene Muza was the medium. Irene, in 1908, began to weep when asked what would happen in 1909, saying, "It is horrible," but nothing more. She perished in the fire of February 23, 1909. This premonition is too vague to carry weight.

The little daughter of M. Domenico Fleres, barrister in the Appeal Court of Palermo, leaving for Messina when she was eight years old, said, "Good-bye, grandma, we shall never see each other again." Some hours before the Messina earthquake, when her mother was putting on her night-socks, the child said, "Why do you put on these death-socks?" and repeated, "My death-socks." She perished in the earthquake (case xviii).

Case xix, a boy of twelve, saw himself in a coffin, and told the story in a semi-hypnotic state. Eight days later he was drowned

in the lake. The case is not very evidential, for the child was sickly and the case is possibly one of suicide.

Auto-premonitions are always a little doubtful, for a non-metapsychic explanation can often be found; nevertheless, in some, as in the Banister and Von Gudden cases, the cryptesthetic premonition is obvious.

3. *Premonitions, Properly So-called*

True premonitions are those in which neither subconscious organic sensation, nor will, nor auto-suggestion can be supposed to intervene.

Instead of following Bozzano's classification, I shall deal with them in three groups according as they occur, (1) under hypnotism, (2) under spiritist conditions, where an external personality, a spirit, or guide ostensibly dictates the premonition, and (3) as casual or accidental premonitions to normal persons, either awake or dreaming. Premonitions that fall within the two former classes are less frequent and less interesting than those of the third class; it is also difficult to draw a line of demarcation between them, for mediums are often in a semi-hypnotic state, and, moreover, even when not in séance, their predictions seem sometimes to be guided by a spirit. Also, normal persons fall into a kind of auto-hypnosis at the moment of premonition.

(a) Premonitions Under Hypnotism

The Seeress of Prévorst, whose psychological state was that of a medium rather than of a somnambulist, gave many prophecies reported by J. Kerner (Bozzano's case xxv).

Bozzano cites five of these prophecies, the most striking of which is the following:

She dreamed that Mme. L., *whom she had never seen,* came to her weeping with a dead child in her arms. Six weeks later Mme. L. was confined and lost her child.

In another instance (case cv) she saw in a dream a person known to her who had died; he was anxious to speak of his daughter, who was menaced by misfortune. Some weeks later a tile fell on the head of this daughter and nearly killed her.

Dr. Rostan (case xxviii) relates that a somnambulist in her sleep predicted that a friend of hers, then not very ill, would die of hemorrhage in six days exactly. The prediction was fulfilled both as to fact and time.

Dr. Liébeault (xxix) cites a prediction by a young girl named Julia, who in November, 1883, said that a certain lady, then in no way ill, would die before the 1st of January. She died on December 31st.

Liébeault also gives the following often-quoted fact: In 1879 a somnambulist predicted to M. L. that he would lose his father after a year; that he would be a soldier, would marry, and have two children; and that he would die at twenty-six. All this was exactly fulfilled, only the death prophecy was left. Then as the approach of the twenty-sixth birthday threw L. into a state of melancholy hypochondria, Liébeault prescribed a counter-sitting and prediction arranged beforehand, which completely reassured L. "But," says Liébeault, *"no man can escape his destiny,"* and L. died at twenty-six.

Mme. G. de Montebello told me the following fact: In April or May, 1884, she chanced to meet at the house of a friend of hers a certain somnambulist who predicted that someone dear to her would perish in a terrible accident. Mme. de M., much moved, asked, "Is it my grandmother?" "No," said the somnambulist, "it is not your grandmother, but someone very near you, who will die by the falling of a wall."

Some weeks later my dear mother, who was an aunt of Mme. de Montebello, perished by the bursting of a dam-wall and was buried under its ruins.

Dr. Osty received, in 1912, the following details from a somnambulist whom he then saw for the first time:

"You live in a little town in the middle of France; your room looks out on a small square. From thence you go to your office; men come and go; it is a constant coming and going. What a mass of papers! You look, you write, and you give the papers back."

In 1914 Dr. Osty was appointed chief medical officer at Vierzon; he lodged in a house answering to the description given; he had administrative work during the war which involved the signing of many papers. In 1912 he could not possibly have foreseen these duties.

A clairvoyant somnambulist (lxxvi) predicted in 1887 that "Marie Thiérault will live a life of pleasure, which will end in a terrible way, before three moons after January 14, 1907. It is not given to me to see the dreadful date, but January 14th rises before me and I see the full moon shining."

On the 18th of January, 1907, Marie Thiérault, who led more or less the life of a light woman, was murdered by her friend, Lucette Joquelet. Lucette was charged at the Assizes, and the defending counsel produced the prediction given in 1887.

This is an amazing and quite unforeseeable premonition. Of course, it may be maintained that the somnambulistic prediction of 1887 was fabricated for the defence. The evidence as given in the trial is perfectly authenticated.

Lady A. (case lxxvii) went to consult Mme. de'E., a somnambulist and seeress, about a theft. Mme. de'E., without the lady having indicated anything about the purpose of the consultation, said that the affair related to a theft of banknotes, and that within two years the thief would suffer capital punishment. She could give only the vaguest indications of his person. Not till very long after did it appear that the thief was the too famous Marchandon, who was executed two years later for murder.

The entire account of this surprising prediction should be read, for it contains many extremely curious details.

Lady Burton (case xciv) tells that when she was a young girl, Isabel Arundell, she met a gipsy woman who gave her a written prediction: "You will cross the sea, and reach the town where your destiny is awaiting you. You will marry a man of the name of our tribe (Burton) and you will be proud of the name." An astonishing prediction, especially as to the name.

Metapsychic stories told by novelists must be accepted with reserve, but it is difficult not to attach some credit to the story given by Arsène Houssaye in his *Confessions* (p. 425). An Italian seeress told his sister Cécile, at Toulon, that the sea would be adverse to her. In 1870 Cécile for this reason would not cross into England. On October 10, 1870, she went for a walk to the Point de Penmarch in Brittany to see the waves breaking on the rocks. A huge wave washed across the promontory and swept Cécile and three other girls into the sea.

Dr. A. Wallace (case cviii) received Mrs. Paulet at his house. This clairvoyant said to his son, young Mr. Wallace, then twenty years of age, who was a student of chemistry, "There will be an explosion in your laboratory in February or March and someone will be injured." Another clairvoyant repeated the same prediction on the 20th of January. On the 9th of March a terrible explosion took place and severely injured one of the students.

Mr. R. dreamed, on May 25th, that a somnambulist told him,

"Your father will die on the 2d of June (1900)." Next day he told the dream to his parents who laughed over it, for Mr. R. (senior) was in good health. On June 1st this gentleman went to a funeral, and jestingly said, "If I am to die tomorrow I have not much time to lose." He went to bed that night in his usual health at 11 P.M., was taken in the night with sudden illness and died on June 2d, twenty minutes after midnight.

Dr. Charles Roux reports three astonishing premonitions made by three different somnambulists to the same person.

The wife of Dr. A. met by chance a somnambulist, who said to her, "In a short time there will be a catastrophe in your family that will cause you much grief." Somewhat affected by this she went to another clairvoyant, who said, "Your children (your daughter) will be ill very shortly; abdominal pains; she will have an operation, but will recover." The third, to whom Mme. A. gave her glove, said, "This glove has been touched by a person who is very ill; she has acute pain in the abdomen, diffused pain. There is pus from peritonitis, but she will recover."

Ten days after the latter prediction Mlle. A., aged fifteen, till then seemingly in perfect health, was attacked by acute peritonitis, was operated on and pus was withdrawn, but, contrary to the predictions, the poor child died.

This triple premonition from three different persons is most noteworthy; not only because of the high scientific authority of Dr. Roux, who is very well informed on scientific matters and in no way credulous, and verified the facts with the greatest care, but because of the agreement of the three sensitives. This leads to the inference not that the clairvoyants were exceptionally sensitive, but that there must have been some powerful exterior cause (what?) that enabled them to foresee Mlle. A.'s illness.

The sensitive Alexis (case cxi) gave a wonderful instance of lucidity and premonition. In 1847 he went, in hypnotic sleep, to Rome and passing before the Pantheon, said, "This monument is destined to a more solemn and wholly Italian purpose." Bozzano rightly insists on the remarkable character of this prediction, made in 1847 and printed in 1867, at a time when no one could foresee that the Pantheon would be reserved as a mausoleum for the kings of United Italy.

Alice gave me two good premonitions in hypnotic sleep. On the 10th of December, 1886, she spoke of someone who would shortly be seriously ill. "Is it one of my children, one of my relations,

or one of my friends?" The answer was, "No, no, but do not take this lightly, it will cause you much trouble. It is not one of your friends, nor a relation, nor a woman, nor a child," and she added these words, which I wrote down on returning home, "He will have shivers, high fever, trembling, suffocation, shudderings of fever, like colic. The fever will come on without much pain, there will be prostration and great lassitude; the head will be affected" (*P. S. P. R.*, 1888, 181). Eight days later, about December 18th, my colleague, Eugène Yung, whom Alice did not know at all, editor of the *Revue Bleue,* connected with the *Revue Scientifique,* and seemingly in quite good health, was taken with shivering, fever, and renal colic due to abscess. The illness made rapid progress, the urinary system became affected, coma set in (Alice had said that the head would be affected) and he died.

The death of my eminent colleague involved me in much trouble and my position as editor of the *Revue Scientifique* was near being compromised.

I ought, moreover, to say that I had completely forgotten Alice's prediction, although I had noted it down, till she in hypnotic sleep recalled it to my mind. She had seen in the newspapers an account of the death and the consequent troubles.

The other prediction is yet more extraordinary. As it is unpublished, I give all needful details.

It was my custom to leave her for some hours in hypnotic sleep; she would then remain quite motionless and on my return two or three hours later the clairvoyance seemed to me more acute. On my return that day she said that something serious would happen. "You will be very angry, very angry indeed. There are people there, and there," pointing with her hand as though there were three or four persons near me. This did not affect me, for I am seldom moved to anger; but she insisted and seemed so troubled that I had to wake her. It was 2 P.M. on a Wednesday.

At six o'clock the same day I went to the office of the *Revue Scientifique* to correct proofs along with the secretary, Dr. Héricourt. Henri Ferrari, editor of the *Revue Bleue,* was there also correcting his proofs. All three of us were absorbed in our work, when one of the contributors entered (I may note *passim* that he afterwards became a colleague of mine). He looked at us with some surprise, and I said, "Excuse us a few minutes, we shall soon have finished." He walked up and down while we went on

with our proof-reading. Then some extraordinary whim took him, he sat himself down before Ferrari and said, "You are just like a —— wren, I don't care a —— for you." I saw Ferrari turn pale, dumb with astonishment, and striking the table I said to X., "You are an out-and-out cad; get out!" and I went to the door and opened it.

That evening X. sent me a challenge to a duel. It is the only one I ever received. Of course, I left it unanswered, and some years later we resumed our good relations.

The important fact is not this absurd and trivial incident, but the prediction of a most unlikely event which provoked in me violent and justified anger; this being one of the very few times that I have been carried away by anger in the course of a long life. Alice had predicted this four hours earlier, pointing to three or four persons round me.

(b) Spiritist Premonitions

The premonitions to which I give this name are not always markedly different from others. They are characterized by this—that the subject is making an attempt to know the future by the planchette, by automatic writing, by psychometry, by crystal vision, or by some other means, instead of remaining passive during his normal life, whether sleeping or waking, and being dominated by the metapsychic fact. He is not suffering an accident, but is making an experiment.

Mrs. Piper (or Phinuit) has often made prophecies of deaths or minor events which have been verified (Bozzano's cases xxi to xxiv).

On May 10, 1892, Phinuit said that the brother of Mr. T., whom Mrs. Piper did not know, had kidney trouble, that his heart would stop, and that he would enter the spirit-world. Soon after it was established that he had kidney disease and he died of syncope in his sleep, September 3, 1892.

Dr. Louis Cohen, of St. Louis (U. S. A.), visited Mrs. Leonard, who described his father quite accurately and told him that his father had died and that he himself would soon be summoned back to America by cable. This was on April 20th; on the 23d the prediction was exactly fulfilled.

Mr. S. Shaw (case xli) saw a professional medium in London, who said, "Your mother is dead," which was untrue. She corrected herself and said, "She will die in three months. She is well

at present but work tires her and she needs to lie down in the daytime. Her death will be sudden." Two months later Mr. S. received a letter from his mother, saying that she was in good health but needed a sleep during the day. She died suddenly two and a half months after the premonition.

Mr. William Stead's secretary, E. M., was in weak health and irritable. Stead thought of closing the connection; but "Julia," writing by the hand of Stead, gave the message: "Be patient, she will come to join us before the end of the year." This prediction was repeated several times. In July E. M. was very ill. Julia wrote, "She will get well, but will not outlive the year." In December E. M. had influenza, and Julia wrote, "She will not come over naturally, and it will be before the end of the year." On January 10th E. M. was extremely ill and Julia wrote, "I may be mistaken by a few days, but all that I have told you is true. Bid her good-bye." On January 12th E. M. threw herself out of the window in her delirium and died.

A friend of Mr. Stead had come from India to England, and intending to make a long stay had arranged for a series of lectures on free trade and other subjects, at Manchester and elsewhere. Julia, through the intermediary of Stead, told him that he would return to India before the end of the year. This was repeated on the 14th and the 16th of August, and on the 11th of September Mr. Tracy refused to believe it, but a month later he was recalled to India by the serious illness of a relation and left before the end of the year (Stead, in *Borderland*, 1894, ii, 43).

A non-professional medium, the granddaughter of the celebrated physiologist, Tiedemann, of Heidelberg, predicted to a young man, Mr. S., that he would become a senator for Missouri in the United States. This seemed so improbable that he laughed at the prediction, but two years later he moved from Wisconsin, where he lived, to Missouri and was nominated senator some time after.

A distinguished physician of Palermo, M. Carmelo Samona, well acquainted with metapsychic science, lost his little daughter Alexandrina, aged five, in 1910. Mme. Samona was wild with grief. Three days after she saw the child in a dream, who said to her, "I have not left you; I have become tiny like that," designating some very small object. A fresh pregnancy was the more unlikely in that Mme. Samona had undergone a serious ovarian operation a year previously. On April 10th, however, she became aware that she was pregnant. On May 4th it was predicted by

Alexandrina, communicating by means of the table, that Mme. Samona would be delivered of twin girls, one of whom would entirely resemble Alexandrina. This came to pass. One of the twins had a mark on the left eye and another mark on the right ear with asymmetry of the face, precisely like the deceased child (Duchatel and Warcollier, *Les miracles de la volonté,* p. 239).

This premonition would seem to imply the phenomenon that spiritists call "reincarnation." But the data on this perplexing problem—the most obscure in the whole of all metapsychics—are so fragmentary that they amount to nothing from the point of view of strict science.

Dr. E. Waller relates a fact that seems to show cryptesthesia. He saw in the crystal a lady, Mrs. D., well known to him, and with her another person whom he did not know. A few days later he met Mrs. D. with this other person in the place that he had seen in the crystal under tragical circumstances which ended in a real drama (*A. S. P.,* 1905, xv, 133-141).

In February, 1890, impelled by a power that she could not resist, Mrs. R. V. went to consult Zuleika, a professional seeress. Zuleika told the lady that her husband would leave for South Africa, would die there in November of the same year, and that he ought to set his affairs and his insurances in order so as to avoid heavy expenses and much trouble for all concerned. Mr. V.'s departure, which was uncertain, duly took place, and in November, 1890, he died in Africa, in despite of his robust health. The precautions indicated had not been taken, whence much expense and trouble resulted; "disastrous consequences" Mrs. V. calls them (Bozzano, liv).

Zuleika's premonition was noted down by Mrs. V. in her diary in February, 1890.

Bozzano's cases (lvi and lvii) are authenticated by numerous witnesses. They are as follows: On the 22d of April, 1877, the eldest daughter of Mr. Maxfield, a very well-known hotel manager in New York, said to Dr. Anthony (who made a written note of the prophecy), "I have just heard a voice speaking very clearly at my ear: you will die first, then Harry, then your father; and Dr. Anthony will be present on each occasion." The three persons referred to were all in perfect health, but the daughter died on November 9, 1879; Harry on June 22, 1884, and Mr. Maxfield on July 2, 1884. Dr. Anthony was present at the three deaths.

A similar prediction was made by a medium to the eldest

daughter of Westland Marston. "You will die first, then Nelly, then Philip, and your mother last." All came to pass exactly.

Mr. Paige went to a medium without giving his name; she told him the name of his wife, Eliza Anne, and of her sister Maria. She described accurately the very serious illness of the former, and predicted that in three days Eliza Anne would see her deceased mother at her bedside; which came true.

A lady known to Mrs. Sidgwick (case lxvii) went to consult a medium, who told her, "You are wearing a photograph of your children," which was correct. Indicating two, she said, "Those two are dead," which was so, and pointing to another, "This one will soon be with us, and his transition will be sudden." Some weeks later the elder son of this lady was killed in a football accident.

J. Maxwell has published (case lxxiii) the remarkable premonition given to me by Mme. X. The personality speaking through her mediumship purported to be my friend, Antoine B., long since deceased. Mme. X. predicted to me the death of Antoine B.'s widow, who had become Mme. L. by a second marriage. This lady was in very good health, but Mme. X., on looking at a few words of her handwriting, said to me, "I see the figure 7, which means that Mme. L. will soon die." Mme. L., who was quite unknown to Mme. X., died just seven weeks later.

The premonition went further. On the 8th of July, 1903, Mme. X. wrote to me, "Someone tells me (?) that one of the sons of Mme. L. will die before two years are past. I suppose it must be Jacques B., but this was not told me."

On the night of December 23d Louis B. and Oliver L. (stepson to Mme. L.) were in a disastrous railway accident on the Northern of France. The former escaped by a miracle, the latter was killed on the spot. The premonition was, however, still more exactly fulfilled than by the death of this stepson. Fate is inexorable. Mme. L. had a son, Gilbert L., who died suddenly a short time later of cardiac failure after a slight attack of diphtheria that seemed nearly cured.

Some instances of premonition are given by Rémy which are the more interesting in that Rémy sets himself the task of proving that nearly all so-called spiritist phenomena are due to tricks played on simple people. Mlle. X., the daughter of a school inspector of Lot-et-Garonne, was amusing herself and some friends by "making a table speak." "Ask it when I shall retire,"

said her father, as a jest. "In eight days," the table replied, and everyone laughed, for Mr. X., then forty-five years of age and in excellent health, had no thought of retiring.

Mr. X. died suddenly forty-five days later. I may observe that M. Rémy, who is so severe on the experiences of others, is very lenient to this premonition, which proves absolutely nothing.

An eminent writer, Paul Adam (Bozzano's case xci), could write automatically messages which purported to come from *l'Etrangère*. One evening *l'Etrangère* said to one of the friends of Paul Adam, who was a hardened bachelor, "In four years you will marry a lady living at No. so and so, Avenue Marceau." At that time the house designated by this number was being pulled down. Four years later this gentleman met the lady in the house built on this site and married her.

Case cxii is one of the most remarkable in metapsychic literature. On December 11, 1901, Mrs. Verrall wrote automatically, "Nothing should be neglected, the most trifling facts may be useful; be trustful. . . . The cold was intense and a single candle gave a poor light. He was lying on the sofa or on a bed, and was reading *Marmontel* by the light of a single candle. She will remember" (referring probably to Mrs. Sidgwick). "The book was lent him, it did not belong to him."

On December 17th Mrs. Verrall had a second message: "The name *Marmontel* is correct . . . a French book, I think his memoirs. The name *Passy* may help him to remember Passy or Fleury. The book was bound in two volumes, the binding was old, and the book was lent him. The name Marmontel is not on the cover."

On March 1st Mr. Marsh, a friend of Mrs. Verrall, related at table in her house that he had read the memoirs of Marmontel one bitterly cold night in Paris, the 20th of February, by the light of a candle, once when in bed and again reclining on two chairs, that he had spoken of its contents to friends in Paris, that the book was in three volumes, of which he had borrowed two from the London Library and that on February 21st he had read the chapter in which Marmontel describes the finding of a picture painted at Passy, and that the discovery was associated with M. Fleury.

We have here a prediction of a series of unimportant events in minute detail. These events could not possibly be anticipated (nobody reads *Marmontel*), even the single light being specified.

The prediction was on December 11, 1901, and the events did not take place till February 21, 1902.

Miss Freer (Bozzano's case c), looking in the crystal, sees a man's head wrapped in some undefinable thing, looking in at the small window of her room. Three days later there was a fire and a fireman came to that little window, with his head wrapped in a wet cloth, presenting exactly the image she had seen.

J. Maxwell cites an interesting case. A., looking in the crystal, sees a large steamer with black, white, and red bands on the funnel, bearing the name *Leutschland,* enveloped in smoke and sinking, passengers and people in uniform running about the decks. Eight days later the newspapers announced the bursting of a boiler on board the *Deutschland.* A. was in no way concerned with maritime affairs.

With the exception of the Saurel prediction, which will be described later, all the spiritist predictions relative to the Great War are too vague for notice. Mrs. Chenoweth's premonitions, despite the care with which Hyslop has collected them, are uncertain, being little, if at all, beyond the reach of normal intelligence.

As for premonitions announcing serious events, generally deaths, by noises and knocks, there are many, but few are evidential. It will suffice to mention that of the Rev. T. B. Wood, who heard on the eve of his father's death three distinct knocks on the andirons. He, and also his servant Cyril, heard loud knocks on October 20, 1919, and said, "It is the Wood knockings; someone is going to die." Three days later a cousin, till then in good health, died suddenly.[1]

(c) Accidental Premonitions

I refer to this class all premonitions which occur unexpectedly to normal persons, without experiment, without crystal vision, planchette, automatic writing, or any other all-voluntary action. The premonition comes to them unsought. These may be classed (with Bozzano) as follows:

Premonitions—

Of sickness and death due to natural causes.

Of accidental deaths.

Of sundry events.

[1] P. Myers, *S. P. R.,* xi and Kingsford, *loc. cit.,* 161.

(a) Premonitions of Sickness and Death Due to Natural Causes

Miss B. was exceedingly anxious about her father's health, though medical opinion was that his indisposition was very slight. She hurried back, whenever obliged to leave the house, fearing to hear of misfortune. This lasted for some days. One day her father fell in an apoplectic fit.

This case is not evidential, for the daughter might well guess her father's danger from various symptoms. I only mention this case (Bozzano's xxvii) as a caution that none such should ever be brought forward as having any value.

M. Salvatore Balsamo (xxxi), watching at the bedside of his brother-in-law, hears a noise of breaking glass and china in the next room a short time before the death. Several persons in the sick-room heard the same and state that there were loud knocks on the terrace, for which no natural cause could be found.

Here, again, the premonition is too vague and the brother-in-law's death too likely to make the account worth consideration. Only methodical study of a large number of such cases will enable inferences to be drawn.

Mrs. Baker's sister sees a coffin before the piano in the drawing-room (case xxxiii). She nearly faints when telling her vision. Three weeks later another sister died and her coffin was placed in front of the piano, just where it had been seen.

Moritz gives the story of the pastor Ulrici, who saw in a dream one of his clerical friends dead. He told the dream to his wife, went to the church and preached, but was still obsessed by his dream. Later in the day a servant came from the village of R., of which his friend was the minister, with the request that he would come and baptize a child. He asked why their own pastor did not perform the office. The answer was, "Because he is unable to do so." M. Ulrici said, "It is because he has died." M. Ulrici, therefore, saw the death of X. eleven hours before it occurred, with all the attendant circumstances.[1]

The Rev. Mr. Dulley relates that Mrs. Jones, watching by her sick child in the early days of September, saw three little coffins put into a hearse, two white and one pale blue. Her little boy Peter died on October 2d, and also a neighbor's little son. Both

[1]Cité par Passavant, *Unters. über den Lebenmagnetismus,* 2d edit., p. 135, Frankfort, 1837.

funerals were on the same day, and at the last moment a third coffin, a pale-blue one, was brought. It was that of a child in the same parish whom Mrs. Jones did not know. When this last coffin appeared, Mrs. Jones cried out, "That was my dream." She had already told her husband on the morning following the dream.

M. Adrien Dufilhol relates that his grandfather heard a voice saying, "A death in the family." The grandfather thought in silence, "I am the eldest; is it I?" The voice answered "No, it is Adolphe Planes." Adolphe was Mme. Dufilhol's brother and was not ill; two months later he died unexpectedly.[1]

The next case may possibly be attributed to coincidence, though this is unlikely. Mr. Lauritzen never made a memorandum of any dream except this one of which he wrote in his diary: "Three days ago I dreamed that F. F. would be free in four years." The phrase "to be free" was used to signify death. Mr. F. F. was then in perfect health. He died four years and four days after Mr. Lauritzen's dream.[2]

The following premonition is somewhat vague, but the symbolism is very interesting. Mrs. Munro dreamed of her son, an officer of the Flying Corps in Palestine. She saw him with a serious wound in the forehead and heard a voice saying, "He has eaten an ice; it has given him a headache." Then she saw her son as he had been at eleven or twelve years old. At that age he could not eat ices, they gave him headache. Mrs. Munro was so disturbed by this vision that she sent for the doctor, who found her ill from the emotion. Her son was killed on November 2, 1917, by a bullet in the head (*J. S. P. R.*, December, 1920, 272).

Mrs. Morrison, at Wellesley, in India, heard a voice saying, "When the darkness thickens at the eleventh hour death will pass." Mrs. Morrison, who was in bed, got up in a fright; the words were repeated again by the same voice, slowly and deliberately. Two days later Mrs. Morrison's little daughter fell grievously ill. For eight days there was no cloud in the sky, but on the eighth day a terrible storm arose and a few minutes before eleven the house was quite dark. The child died at 1 P.M. (*A. S. P.*, 1907, xviii, xxxv, 712).

Bozzano's case xxxviii shows a strange symbolism. Mrs. Z., paying a visit on June 15th, saw (in imagination) an unknown

[1]Cité par Flammarion, *loc. cit.*, 538.
[2]*Case of Dream, Journ. S. P. R.*, December, 1911, 173.

man by her hostess, who plunged a knife into her side. She told Professor Andrew Lang, who laughed at her and said, "I'll bet a hundred pounds that this vision will not be realized."

Mrs. Z., again visiting her friend, met the man of her dream on the stairs, to her great amazement. Her friend was dying and the man in question was the surgeon who had operated on the left side of her chest.

Mme. Buscarlet writes to Mme. Moratief, on December 11th, a letter that has been preserved: "I have had a queer dream. You and I were in the country when a carriage passed us, and from it there came a voice that called us. It was Olga Popoff, who said, 'I have called you to tell you that Mme. Mitchinoff will leave the Institute on the 17th.'" Two weeks later Mme. Mitchinoff died of acute diphtheria on the 16th of the month, and on the morning of the 17th the body was taken to an adjoining chapel for fear of contagion.[1]

This is a well-marked case of premonition, rigorously authenticated, and so precise that no accidental coincidence can be alleged.

Mme. L. knew that a friend of hers, Mr. C., was ill. On a Monday night she dreamed that the doctor in attendance came and said gravely and sadly, "Mr. C. will die on Thursday at four o'clock." She woke up, repeating "Thursday at four." Her husband said to her, "What do you mean?" On Thursday Mr. C. was better and seemed to be recovering, but had a relapse and died on the following Thursday at four o'clock (*J. S. P. R.*, December, 1906, 340).

Mrs. Campbell (xlvi) dreamed that she was attending a funeral in a snow-storm. She could not read the name on the coffin, but saw an abundance of flowers and in the middle a large bouquet of roses. She told the dream and it was considered prophetic of bad news. Twenty minutes later she had a telegram recalling her to Montreal, where her sister was taken ill. Some months later this sister died, and during the funeral a heavy snow-storm came on. The coffin was covered with flowers with a bouquet of bright colored roses in the midst.

Alexandra S., aged nine, at Trieste, saw a hearse and dead body just as she was about to go out for a walk. She threw herself into her mother's arms, crying and saying, "Someone is

[1]This case is reported by Flournoy in the Arch. de Psychologie of Geneva. He adds also some critical remarks that I cannot endorse; they seem to me insufficient. See also *A. S. P.*, 1907, xvii, 710.

dead." All those about her were in perfect health, but three days later her father was taken ill in the night. He looked at the child, who said, "Mother, how do people look when they are going to die?" Her father died a few minutes later (*A. S. P.*, 1899, ix, 196).

The next case is very evidential, by reason of the number of unlikely details exactly foreseen.

The Duchess of Hamilton had a kind of vision of Lord L., whom she only knew by sight, and did not know to be ill, stretched on a sofa as if insensible, and a man with a sandy beard bending over him. There was also a bathroom with a red light. This was told by the Duchess of Hamilton to Dr. Cooper, who was attending Lord L.

Lord L. recovered from his indisposition, but fifteen days later a more serious illness supervened; and Dr. Cooper saw the scene described—the patient nearly insensible, the bathroom, the red lamp, and an attendant with a sandy beard.

The good faith of the duchess and Dr. Cooper being unquestionable, the premonition must be of a metapsychic nature, for accidental coincidence is not to be thought of.

Bozzano places premonitions made long before the event in a special class by themselves. A very remarkable one is as follows:

Mr. Edisburg was a medical student, who, in 1859, had a dream of which he could only recall the date "June 9, 1864." He spoke of it to the assistant surgeon, saying, "It is the date of my death or of some great misfortune," and he wrote on the hat-rack of the antechamber in the hospital, "June 9, 1864, J. F. E."

Five years passed. Mr. Edisburg married, and his wife died on the 9th of June, 1864. Returning to the hospital he and two of his friends verified the date written on the rack.

If the calculus of probabilities be applied to this wonderful premonition, we might set the odds at 1 : 365 x 5, or say 1 : 1,800 (as if the red came up eleven times running at roulette). This, however, would be grossly against good sense, for it would omit all consideration of the cause whereby this date was presented to the mind of the dreamer. To return to the analogy of the roulette-wheel, it is one thing to say, "I know that the red will not come up eleven times running" and quite another to say that this has happened in the course of a long series of trials. The premonition consists in the fact that the date was indicated only once, and correctly. If eighteen students were each to indicate some fateful

date in the ensuing five years there might well be coincidences, but in this case there was but one who had that prevision and the prevision was verified. Chance cannot be invoked.

(b) Premonitions of Accidental Death

Premonitions of natural death, at any rate when not long before the event, can be referred to some kind of cognition of the organic condition of the person whose death or illness is foreseen. This, however, in no way applies to accidental deaths; hence the metapsychic importance of premonitions of sudden, tragic, and unlikely deaths that no mere perspicuity could foresee.

Captain de Montluc, in his commentaries, tells how he foresaw by a dream the mortal wound of Henry II of France in a tournament. "The night before the tourney in my first sleep I dreamed that I saw the King seated in a chair, his face all covered with drops of blood, and I could neither discern what ailed him nor see anything but the blood on his face. I seemed to hear others say, 'He is dead' and others 'He is not dead yet.' I saw the doctors and surgeons coming and going . . . and on awaking the tears were on my face, nor for some time could I refrain from weeping. My wife tried to console me, but I could not be persuaded. Several persons living know that this is not a tale, for I told it as soon as I was awake. Four days afterwards a messenger arrived at Nérac, bringing the letter from the Constable of France to the King of Navarre, telling him of the wound and the small hope of life" (Flammarion, *La Mort et son Mystère,* 536).

Another historical document is quoted by Flammarion:

Nicolas Pasquier writes to his brother, "Last year, on August 30th, about five in the morning, I dreamed that I was with our father, who was in bed, whence he rose to pray to God, which he did devoutly with both hands raised. When his prayer was ended he changed colour and fell dead into my arms. I awoke, trembling, told the dream to my wife, and to keep the memory of it unfaded I wrote it down. Thus I saw our father's death one year exactly to a day before it happened (Etienne Pasquier died August 30, 1615). On the actual date of his death I came across the paper of which I had not thought again. The news only reached me on September 3d. If you dissect this dream you will see that all the circumstances were foreseen—that he would not

be long ill (he was only ill ten hours), that he would die a good Christian and in full possession of his senses." Certainly the approaching death of Etienne Pasquier, then aged eighty-six, was not unlikely, but even so the coincidence of dates is noteworthy.

Baron L. Hellembach (Bozzano, lviii) intended to consult the celebrated Hauer, his colleague, on a matter of science. During the preceding night he dreamed that he saw a man (unrecognized) pale and helpless, held up by two men. In the morning he went to the geological institution that Hauer directed, and finding the door shut, looked through the window, where he saw the exact repetition of his dream. Hauer had poisoned himself with potassium cyanide.

Recognition is wanting here; possibly, too, Baron Hellembach did not tell his dream to anyone before verification, so that paramnesia may account for much; or telepathy may be admitted. Hauer's mental agitation before suicide may have caused the vision.

Recognition is also wanting in the next case:

Miss Bale heard a ticking in her room like that of a clock during all the month of June, but this ceased as soon as anyone else came in. After a month and a half she had become used to the sound. On July 12th she saw a human form standing with outstretched arms. It soon vanished. On September 23d she heard of her brother's death by drowning (on July 12th), after which the ticking ceased (*A. S. P.*, 1907, xvii, 724).

Myers reports a good example of symbolical premonition: Field Marshal Lord S. dreamed two days before his daughter fell ill that he urged her to read the *Life of Charles James Fox,* but that she replied, "Oh, I do not need to read it; it is the end," and that she showed the last page on which "The End" was written in large black characters all across the page (*P. S. P. R.*, 1895, xi, 442).

The death of Miss S. was also the subject of a premonition. Her sister saw her standing before her, saying, "Remember, I have called you, it is five o'clock, and now I am going away; I am going away, remember."

Premonition of death in which a "double" seems to appear are not infrequent; e.g., the remarkable case of Dr. Isnard mentioned above, p. 340.

M. Boisnard dreamed very clearly of a child's funeral, coming away from a neighbouring house. The dream haunted him all

day. In the evening one of the children from that house, aged four, fell into a ditch and was drowned (Bozzano, lix).

The brother of M. Zipelius, a painter of Mulhouse, aged twenty-five, said to his porter, "If I do not return this evening seek me at the mortuary. I dreamt that I was at the bottom of the water with my eyes open." His mother had foreseen this misfortune (how?) and when the bad news was brought her she said, "No need to say more; I know that my son is drowned." Zipelius had at first refused to bathe in the Moselle because of his dream, but in the evening he resisted no more and perished (lx).

M. A. Lavaut recognized during the war a place that he had seen clearly in a dream in 1911. He then saw himself in an officer's uniform (though he had never been in the army) surrounded by soldiers *in blue*. In 1918 his dream came true. It is certainly not a coincidence, as he quite rightly says; but it may possibly be a case of paramnesia. The testimony of those to whom the dream was told in 1911 is required (*Revue Spirite,* lxvii, 1919, 267).

On Sunday, August 14th (case lxi) Mme. Thomas saw in a dream the funeral of a child coming from the orphanage of Tréforest down the left-hand slope of the hill. The coffin was borne by the other children. She went to the orphanage and was told that none of the inmates had died. On the 17th (Wednesday) a child of three, not belonging to the orphanage, was drowned; and the mother asked that the orphanage children should come to the funeral. This was permitted, the procession passing on the left side of the hill as seen by Mme. Thomas in her dream. Bozzano remarks that premonitions dealing with funerals are frequent.

Miss Gwendoline Janesson (pseudonym, *J. S. P. R.,* February, 1920, 161) dreamed, on the night of August 2d, that she saw a funeral and heard a voice saying to her, "It is Leonard." She saw Mr. V. and Mr. L., the two best friends of her fiancé. Leonard. She then found herself alone at the tomb, and Mr. L. came and took her by the arm. She told this dream to her mother. She spent the 5th of August with her fiancé, who seemed in good health, but next day collapsed in his chair and died of heart failure. There was nothing to cause any anticipation of his death.

I have myself had only one premonitory dream, and that a vague one. Though I never dream of music (for good reasons), I dreamed that I heard Chopin's "Funeral March." The impression

was clear and I wondered what eminent person might be dead. Three or four days later I was invited to an important funeral and I imagined that the dream might be an interesting premonition. I went, perhaps for that reason, expecting to hear Chopin's march. I was much disappointed when nothing of the kind took place. But returning home I came across a military funeral and the band was playing Chopin's march. This may have been a coincidence, but I am inclined to think that there was a premonition.

Dr. Haye, at Norwalk, dreamed that three of the boys at his school were drowned, and he told the masters to take every care. The next day, as the boys were going for a walk, he renewed his caution; but the accident took place, and three were drowned (lix).

Mme. Mastro Pietro, an aged peasant woman of Castel di Guido, a lonely village near Rome, had terrifying dreams night after night. She heard moans and distinguished the cries of her married daughter Caroline, living in Rome. One morning she made up her mind to go to Rome, and reached her daughter's house only to find that she had been burned and had just died (case lxv).

M. Nolte sees his niece Hélène, a little girl (of six) run over by a tram-car (5.30 P.M.). He told his dream and advised close care of the child; but as if destiny were inevitable, the child was run over and killed by the tram when crossing the street at that hour.

Bozzano's case, lxviii, carefully studied by Hyslop, is of extraordinary interest and lends itself to much comment.

In July, 1897, Mrs. D., whose little girl Betty was aged two years, heard a voice saying, "She will not need it," every time that she thought of the child's future. When she went to buy shoes for the child, the voice said to her, "She will not need them." Several times, both when awake and in dream, she had visions of the little one's cradle in flames. Eight days before the accident she smelt burning, though there was no fire in the house. An hour before the catastrophe she had the idea of destroying the matches in the room, but thought, "I will do it after my son comes in." At ten o'clock she put Betty into her cot, and while doing so heard a voice saying, "Turn the mattress." As she was in a hurry, she said jokingly to Betty, "I will turn the mattress when you have gone bye-bye." A few minutes later the cot was

in flames and little Betty mortally burned. It is supposed that the child had found a match, had lit it, and so started the fire.

The following striking occurrence has been given me by my learned colleague, Professor Thoulet, of the Faculty of Sciences at Nancy, who has confirmed it orally several times.

Thoulet, then a student, had gone to Italy to Rivazzano, to assist a young French engineer, M. F., whose wife lived at Toulon. Thoulet and M. F. slept in adjoining rooms. In the middle of the night Thoulet got up, went into M. F.'s room, and said, "You have a little girl: the telegram says . . ." and he began to read an imaginary telegram whose meaning he could clearly perceive though the words disappeared by degrees. Some time later (*How long?* C. R.) Mr. F. received exactly the same telegram, the words and intention being the same as perceived by Thoulet in his momentary access of lucidity. "I have no material proof to give," he now says, and "if anyone told me the story I could not believe it, but I can only say that I must admit to myself that it is true."

Etienne de Grillet, a member of the Society of Friends (Quakers), relates that the Countess Toutschkoff, the wife of a Russian general, dreamed before the French invasion of 1812, that her father (living) came to her, holding her eldest son by the hand, and said, "Thy happy days are past; thy husband has fallen at Borodino." This dream was repeated three times. She told the general, and asked, "Where is Borodino?" The general did not know of this obscure village and they could not find it on the map. Some months after, her father came into her room with her eldest son as in the dream and said, "Thy husband is dead, he has fallen at Borodino!" (lxx).

Mr. Ivey, of Forney (Texas), waked one morning, December 19th, in a state of the utmost distress about his son, aged nineteen, who had taken up his abode on a neighbouring estate and was, as far as known, in no danger whatever. Mrs. Ivey also dreamed at the same time that she went on a journey in a carriage, that she was in a room in a house she did not know, surrounded by a large family, with a girl unknown to her and children about to leave for school.

In this dream there was both a monition and a premonition. The son of Mr. and Mrs. Ivey had met with a serious carriage accident on December 17th, so that his parents' distress was

monitory and not premonitory. The premonitory features were the arrival of Mrs. Ivey in a carriage, she having missed the train, among the unknown family, at the bedside of her son, who died on December 19th at 1 A.M. All the details of her dream were actually reproduced (Bozzano's case, lxix).

Some reservations may properly be made as to the metapsychic bearing of the premonition, for the likelihood of the sequel to the monition itself might possibly explain it.

Three times in the course of the year 1909, Mme. Brot, of Alais, wrote to the Count de Tromelin to tell him of her presentiment that she would be widowed through a railway accident before the year's end. On December 10, 1909, her husband, employed at the station of Alais, had his head crushed by the buffer of a wagon (lxxxi).

Mme. Lolla, in Russia, dreamed that her mother came into her room saying, "Lolla, don't be frightened, but the barn is on fire." Next day the dream came true; her mother using the same words. (Is there a possibility of paramnesia here?)

Lolla, who afterwards married M. de R., went to a family chapel in the cemetery. While on her knees, praying, she heard a voice telling her, "You will be widowed, but you will not have the consolation of praying at my son's grave." She fainted with emotion. Her husband, Colonel R., some months later was mortally wounded in the battle at Moukden. His body was not recovered.

(c) Premonitions of Sundry Events

The first case adduced here is an excellent instance, because the evidence is conclusive, verified before the event, and the probability can be fairly well calculated.

M. Gallet, student of medicine at Lyons, was preparing some examination work in his room about 11 A.M. He was obsessed by a thought that distracted his work, and he wrote down in his note-book, "M. Casimir-Périer has been elected President of the Republic by 451 votes." Gallet cared nothing for politics, and the phrase dumbfounded him. He showed it to his comrade Varay, with whom he was working. After lunch Gallet went to his lectures, and meeting two fellow-students, Boucher and Delorme, he told them the premonition, at which they only laughed. After lecture, the four students went to a café and

shortly after the Paris newspapers arrived, announcing the election of Casimir-Périer by 451 votes.[1]

Gallet is now a physician at Annecy, and a senator of Savoy; Varay is a physician also, at Annecy; Delorme is a pharmacist at Thonon; Boucher, a physician at Cruseilles. All four certify to the strict truth of the fact, which they remember quite clearly.

The candidature of Casimir-Périer was very doubtful, and unlikely: the betting was on Brisson or Dupuy. The probability of his election was very slight, but even admitting an equal chance for the first three candidates the probability that one of them would get 451 votes out of 845 is 1 : 845. But the basis of calculation is very defective. Chance may always be invoked, it is a convenient way of avoiding thought. What was the cause that impelled Gallet to write on the margin of his anatomical notes, "Casimir-Périer has been elected by 451 votes"? This case is, to my thinking, one of the most decisive proofs of premonition on record.

Several cases of premonition on games of chance, lotteries, and races have been noted.

A cousin of my own, living in the country, who never bet on races, heard one evening, on putting out her lamp, loud plaudits and shouts of *Clamart, Clamart.* She re-lit the lamp and all was silent. On her putting out the light the plaudits began again. She thought at first that it must be the name of the station on the Paris-Versailles line shouted by the porters; but suddenly remembered that a horse of that name was running. She staked on *Clamart,* without knowing exactly what this bound her to. *Clamart* was the winner.

Charles Cascel, two months before the ballot for military service, saw something undefined in his room on which there appeared the number 90 in large figures. He shut his eyes and re-opening them still saw the figures 90. Frightened by this, he

[1]The results of the voting were:

Voters: 845.	Votes
Casimir-Périer	451
A. Brisson	195
Dupuy	97
Général Février	33
Arago	27
Divers	22

began to pray (*sic*). On the day of the drawing he announced that he would draw number 90, which he did, to the amazement of those present.

Several analogous cases have been collected by Professor Hulin of the University of Ghent.

To estimate justly the value of such divinations we ought to know how many have failed, for too often the successes are noted and the failures are forgotten. The calculus of probabilities is only applicable if strict records be kept of all trials, and if failures are taken into account as well as successes, which is very seldom done.

Some interesting facts relative to roulette at Monte Carlo were collected by a friend of mine, an experienced physicist and mathematician, who communicated to me the results of his methodical enquiries and calculations of probability. His wife, Lydia, aged thirty, and the mother of a family, had some occasional premonitions, of which only the following have been accurately noted:

On the 2d of May, after seven or eight days on which Marcel had steadily lost, she said, I dreamed that we should win on 14. Marcel then staked eighteen consecutive times on twelve numbers: the 14 won. On these twelve numbers of his system, four only succeeded, among which was the 14. The odds were therefore 4 : 12 or 1 : 3, which counts for nothing. But the 14 was repeated twice, it came up a second time immediately after winning a first time. Gamesters make a practice of leaving their stake on a winning number, and the probability of its coming up again is 1 : 37; so that the probability of the 14 turning up a second time was $1/3 \times 1/37$, or 1/111; so that its turning up is not very marvellous. But on May 3d Lydia dreamed again that she would win on the 31. The event of the previous day with the 14 was repeated *in exactly the same sequence;* so that the two successes took place against odds of 1 : 12,000.

It was observed that in the course of numerous trials Marcel never had a *repetition* after winning on one number; the only repetitions he had were of the 14 and the 31.

To realize how faint was the chance of correct prediction, it will be found to work out that only once in thirty-two years of daily trials would two named numbers come up in succession.

On the two following days Lydia named two other numbers that did not come up at all.

On the fifth day she said 32 and 35, without knowing why. On 124 trials the winning numbers that day were as follows:

34—8 times.	30—6 times.
35—7 times.	19—6 times.
32—7 times.	3—6 times.

Other numbers, less than 6 times.

The 32 and the 35 therefore came up nearly twice as often as was to be looked for. It will be remarked that 34 is intermediate between 32 and 35.

The probability can be roughly calculated as follows: Supposing that the 32 and the 35 came up 14 times when they should have come up 6, 8, or say 7 times, that would mean that they had come up 7 times more than was probable. This is a probability of $(\frac{1}{2})^7$, say 1 : 128. To simplify matters we will suppose that the compounded probability on the five days' play (with two failures) is 1 : 110 instead of 1 : 111. Then, according to the recognized formula, the total probability in round numbers is 1 : 130,000.

The sixth day Lydia dreamed that she would win on the 16. At a given moment she staked on the 16, which won, the probability being 1 : 37. So that on the six compounded trials the odds against correct prediction by chance alone would be 1 : 5,000,000.

It is true that this calculation cannot be considered strictly accurate, for the *repetition* is taken into account for the first two days, the *most frequent numbers* on the fifth day and a *single number turning up on one trial only* on the sixth day; all different facts not strictly comparable.

It should be added that later on Lydia had only failures. Still, taking into account the compound event when odds were so great, the fact that the numbers were indicated before the event confirms the conclusion that premonition may sometimes occur with reference to games of chance. The problem is, however, too obscure for anything more than a mere mention of the facts. M. E. Desbeaux has published an interesting note on this subject (*A. S. P.*, 1909, xix, 127).

Lombroso mentions the case of Rosa Tirone, quoted by Bozzano (lxxxviii). In November, 1908, she dreamed that her fiancé, who had died not long before, said to her, "I do not wish you to be a servant any longer; play the numbers 4, 53, 25, and 30," and he added, "I am thirsty, get some water in a bucket and give me to drink." The four numbers named were winners, and

if Rosa had played the fifth number which corresponds, according to popular opinion, to giving drink to the thirsty, she would have won on this also.

The previsions mentioned by E. Carreras regarding lotteries (*La Previsione dei Numeri. Luce e Ombra,* 1919, xix, 127) cannot be considered evidential, for if R. could guess winning numbers more often than chance would account for, he ought to have realized considerable sums of money. It may therefore be inferred that the list given by him to M. Carreras is not complete, as indeed M. Carreras indicates (*da veri indizi debbo credere che ve ne furono alcune oltre che anderono perdute*). On 150 drawings of numbers with two figures, five such numbers at each drawing, the probability is 1 : 20. R. chose 106 times. The probable number of successes was 5.3, say 6, but he had 19 successes. The excess is notable, but not more than might be referable to chance, especially if all the numbers played (probably losing numbers) have not been given.

It has been remarked, not without reason, that if there were any power of divination, even subconscious, with regard to games of chance, lotteries, races, etc., fortunes might be won, whereas nothing of the kind takes place. But it may be answered that verified premonitions are extremely rare, sporadic, and very exceptional. The spirit breathes where it will (*spirat ubi vult*), and the fateful number will not be discovered by poring over a series of figures with set purpose.

Not only is prophecy rare in those who have the power, but those who have it are very few; so that if sometimes there really are divinations, these are so infinitesimally few by comparison with normal anticipations as to be practically negligible.

Charles Linnæus relates in his autobiography (1823) that when he was at college, where his intelligence was not highly rated, a seeress told him, "You will be a professor, you will travel to distant lands, and will be the most celebrated man in the kingdom" (xcv).

The following case is interesting, having been observed by the great Schopenhauer (Flammarion, 133):

"One morning," says Schopenhauer, "having written a letter, I laid my hand on the inkpot instead of the sand-box to dry the writing. The ink was spilt on the floor. I called the servant to wash the floor. While she did so she told me that she had dreamed the previous night of doing this and had told her dream to the other servant, who confirmed the statement.

"This story, whose truth I guarantee," says Schopenhauer, "puts the reality of such dreams beyond question. Therefore all that happens is fated . . ." We may accept his evidence without drawing his conclusion.

From the historical point of view we may quote a premonition occurring to Charles Dickens, reported by Walter F. Prince (*Am. S. P. R.*, xiv, 1920). He dreamed of a lady in a red shawl, who said, "I am Miss Napier." He wrote, "Why Miss Napier? I know no Miss Napier." Some hours later two persons came to visit him to introduce a lady in a red shawl named Miss Napier whom Dickens did not know at all.

Bozzano's case xcviii is extremely curious; it is well attested. One John Lee was condemned to be hanged for murder at Babbicombe in February, 1889. The night before his execution he dreamed that the trap-door would not work, whatever efforts were made to open it. He told this dream to the warder. In fact, the trap would not open, though it had previously been tried. When Lee was upon it he was half unconscious, and did not remember his dream.

M. Henri Buisson, on June 8, 1887, dreamed that he saw his grandmother dead on her bed and above her a sun bearing the words, June 8, 1888. The dream was told and noted down. One year later, on June 8, 1888, the grandmother died in a quarter of an hour.

He also had a premonitory dream with some strange details which he narrated before the event. On the night of April 9th he dreamed that he saw M. Lépine, the prefect of police, in the street wearing one shoe and one slipper. At this moment in the dream a fire broke out at which M. Buisson in his dream performed wonders of courage. On the evening of the same day, twelve hours after the premonitory dream, a real fire broke out in the Rue Jacquemont, and M. Buisson actually saw M. Lépine wearing one shoe and one slipper. The dream had been told on the morning of April 10th to M. Buisson's mother and uncle.

Mme. S. dreamed that she saw in her drawing-room a lady in deep mourning by the side of her child's nurse; and immediately after, in her dream, found herself in a taxi-cab, which stopped near the Place Pigalle. On the same day she received the unexpected visit of a friend, Mme. P., in deep mourning, who also quite unexpectedly invited her to dine. Mme. S. went to her room to dress, and on returning to the drawing-room saw Mme. P., the

nurse, and the child in precisely the same positions as seen in her dream. A few minutes later Mme. P. said, "It is late, we will take a taxi." The cab took them to the Rue Douai, quite near to the Place Pigalle.

Mme. Ohmus had a horrible dream (xcix), which she told to her husband. She saw herself stretched on the ground, both arms crushed and bleeding. In the evening her little dog *Nello* was run over by a train. Mme. O. then felt the same sensations as in her dream. It would seem that in this case the premonition was of the emotions produced by the accident and not of the accident itself.

Sir A. Conan Doyle reports a personal experience, extremely vague and non-evidential. "Upon April 4, 1917, I awoke with a feeling that some communication had been made to me of which I had only carried back one word, which was ringing in my head. That word was *Piave*. To the best of my belief I had never heard that word before. As it sounded like the name of a place . . . I looked up the index of my atlas . . . a river in Italy some forty miles behind the front line which at that time was victoriously advancing. . . . I could not think how any military event of consequence could arise there, but none the less I was so impressed that I drew up a statement that some such event would occur there and had it signed by my secretary and witnessed by my wife, with the date April 4th attached" (*The New Revelation,* p. 112).

Six months later this river became the front line between the Italian and the Austro-Hungarian armies.

As to this case it is impossible to prove that there was no subconscious remembrance of this geographical name, which must certainly have fallen under Sir Arthur Conan Doyle's eyes some time in 1915 or 1916. There may be a premonition involved, and perhaps the time will come when such facts can be classed as authentic premonitions; but as yet they can only be recorded without drawing any inference from them.

A friend of Miss Violet Lloyd, a well-known English actress, dreamed that Miss Lloyd's face was burned above her eyes. She told this to another friend, who did not dare tell Miss Lloyd. The next day Miss Lloyd, playing Flora in *The Topsy Turvy Hotel,* had her face burned, with two wounds above the eyes (case ci).

Mrs. Carleton (Bozzano's case ciii) wrote to Colonel Coghill, to whom she had not written for a very long while, to say that she

had had a vision in which she had seen him thrown from his horse and in a dangerous situation from which several strangers were endeavouring to extricate him. The vision was on March 26th, the letter on the 28th. On the latter date the colonel answered, "Do not be anxious, there is nothing the matter, dreams are vain." On the 30th, however, he had a terrible fall from his horse which fell into a ditch and was extricated with difficulty from his dangerous position by some friends.

Mr. O. dreamed, though he says it was a vision rather than a dream, that his little nephew, aged six, fell under the wheel of a carriage and was seriously though not mortally hurt. As the dream was much on his mind, he recommended three different persons to take great care of the child. Two weeks later, during a carriage drive, the boy fell under a wheel and had his leg broken.

Sir Oliver Lodge received from an eminent English minister the following account (Bozzano, *loc. cit.*, 343): In bright sunshine and with a cloudless sky, Mr. X. directed his wife to put forward the luncheon hour; for he had dreamed that there would be a terrible storm; that globular lightning would enter the dining-room and would destroy the chimneys of the roof opposite. Everyone jested at the dream, for the sky was quite clear. Nevertheless a storm rapidly came up, a fiery globe entered the dining-room and the chimneys of the neighbouring roof were thrown to the ground.

The celebrated sculptor, Jean Dupré (Bozzano, 356) tells how, driving at Londa, on the precipitous road to Rufina, he heard a voice saying, "Stop!" He could see no one. Mme. Dupré, who was with him, saw no one, but heard the voice. Twice running he whipped up the horse and the voice came again, "Stop! Stop!" He got down and found that the axle had nearly left the wheel next the precipice. They had to finish the journey on foot.

This may be supposed to have resulted from a subconscious observation producing this kind of warning, but how can the fact that two persons heard the voice in this lonely place be explained?

Mr. Young dreamed that a slater working on the roof of an adjoining house would fall into the street, and in his dream he was advised to tell this to Mrs. Young. He did so, and then attended to his business without thinking any more of the matter. At 4 P.M., by a kind of instinctive impulse, he went into the street to the place he had dreamed of and found that the accident had

taken place two minutes earlier and that the unfortunate workman was nearly dead (xvi).

Lady Z. was awakened one night by a heavy thud, as if a human body had fallen from the kitchen roof. She heard moaning, and woke her husband, Lord Z., who heard nothing. She went to sleep again but again was waked up by the same sounds. Her husband, then, at her desire, went out, but could find nothing. The next morning a workman fell in the same place and suffered much injury.

Miss A. MacLellen, of Bridgeport (Connecticut), had various interesting premonitions, most of which, however, do not depart sufficiently from normal probabilities to be evidential of a metapsychic cause. There is one that deserves mention (*J. S. P. R.*, March, 1920). On the night of July 8th, at Boston, she dreamed of a terrible railway accident, and dead and wounded being carried to the Galen Hospital. In the morning she looked in the newspapers to see if such an accident had occurred. On the 11th of July this accident happened near Bridgeport, 12 persons being killed and 48 injured, and these latter were taken to the Galen Hospital—a small private hospital in Boston.

The next case (Bozzano's cx) is one of the most remarkable extant. It cannot be explained by paramnesia; most of its detail was told before the event to Mme. de Figueroa, though it was not written down.

Giovanni de Figueroa, one of the most brilliant fencing masters of Palermo, had a most vivid dream and told his wife all that he had seen: a road white with dust; a large cultivated field, a rustic shed with a cart and harness; a peasant wearing dark-coloured trousers and a black hat, who invites M. de Figueroa to come in. They enter a small stable full of mud and dung. At the other end of the stable some winding stone stairs. A mule tethered to a movable manger obstructs the passage-way. M. de F. causes the mule to be pushed aside and mounts the stairs. At the top of the staircase is a room with a wooden floor and bundles of maize, tomatoes, melons, and onions hanging from the ceiling. In this room, two women, one old, the other young, also a little girl, whose features were clearly seen and remembered. In the next room a double bed, very high off the ground, higher than M. de F. had ever seen.

M. de F. and his wife thought much over this very clear and intricate dream, but could find no meaning in it (August, 1910).

On the 12th of October of the same year M. de F. was asked to assist a fellow-townsman in a duel.

They left, with the two seconds, in an automobile for Marano, a little place of whose very existence M. de F. did not know. As they were going through the country, M. de F. recognized the white road seen in his dream, and said to his companions, "I have seen this before, we shall come to a wooden house and shed." Then all the details of the dream were met with in reality—the peasant in dark trousers and black hat, the mule tethered to the manger that had to be displaced to allow them to reach the stairs, the upper room with the melons, onions, and maize, the three women, the high bed in the next room, etc. The sensation made on M. de F.'s mind was so strong that he says he completely forgot the duel about which he had come.

If some few of the minor details may be referable to paramnesia, there is none the less a mass of facts which have a strongly metapsychic character. I have had to condense and summarize the account and no adequate idea can be formed of the events unless the narrative is read in the original version.

The case of the Abbé Garnier (*La Mort et son Mystère, 277*) is analogous to the Figueroa case. Garnier, in 1846, while at the seminary, saw the whole of an unknown landscape with many details—sheep, men with pointed hats, a foal, a pug-dog, children playing, etc. Three years after, in 1849, when travelling in Italy, he found the whole of these details reproduced in actuality. His good faith is not in doubt, but can he be certain of details enumerated four years later? We must consider some paramnesia possible or even probable, some illusion of having "seen before." A premonition when not written down or told before the event can never be taken as evidential.

Some other premonitions narrated by Flammarion (Princess Carolath, p. 274; Mme. Lebas, p. 283; and Aimée Roger, p. 284) are open to the same objection.

M. Saurel, in 1911, dreamed that he saw a field and stream beside a large building, in a part of the country unknown to him. Soldiers were drawing water, camping, and lighting fires. They were wearing a pale-blue uniform and a curious kind of helmet. He himself was in officer's uniform. On awaking he told the dream to several friends. In 1918 this dream was completely realized. This premonition, attested by M. Saurel's father and mother as having been told them in 1911, should be read in

the original; it is most interesting (Flammarion, *Death and its Mystery*).

Another most interesting premonition, for which perhaps fresh documentary proofs are needed, refers to one of the greatest events of contemporary, indeed of all history. It is a premonition relative to the assassination of the Archduke Ferdinand at Sarajevo, June 28, 1914, for this crime initiated the greater crime of the war, 1914-1918.

Mgr. Joseph de Lanyi, Bishop of Grosswarden, dreamed on the morning of June 28th, at 4 A.M., that he saw on his study table a black-edged letter bearing the arms of the Archduke. M. de Lanyi had been professor of the Hungarian language to the Archduke. In his dream he opened the letter and at its head saw a street into which an alley opened. The Archduke was seated in a motor-car with his wife; facing him was a general, and another officer by the side of the chauffeur. There was a crowd about the car and from the crowd two young men stepped forward and fired on the royal couple. The text of the letter ran, "Your Eminence, dear Dr. Lanyi, my wife and I have been victims of a political crime at Sarajevo. We commend ourselves to your prayers. Sarajevo, June 28, 1914, 4 A.M."

"Then," says Mgr. de Lanyi, "I woke up trembling; I saw that the time was 4.30 A.M., and *I wrote down my dream,* reproducing the characters that had appeared to me in the Archduke's letter. At six, when my servant came, he found me seated at my table, much shaken and telling my rosary. I said at once to him, 'Call my mother and my host, that I may tell them the dreadful dream I have had.'"

During the day a telegram arrived giving the terrible news.

Such is the letter that Edouard Lanyi, S. J., a professor at Laufkirchen, received from his brother, Mgr. Lanyi. Hearing of this letter, M. Grabinsky made certain enquiries which confirmed all these facts. The results of this enquiry are given in *Psychische Studien,* 1918, xliv, 324 and 465.

In this premonition all the details are very full and correct, except as to the shots fired. Bombs were really used, and thrown twice.

It may, however, be asked why this extraordinary premonition was not published till 1918. It may be surmised also that Mgr. de Lanyi knew that the Archduke would go to Sarajevo and that some danger to him might be apprehended.

Granting that it would be absurd to suppose an imposture on the part of Mgr. de Lanyi and his brother, these objections do not seem to me sufficient to warrant a refusal to consider this fine instance of premonition as authentic.

I shall now give in fairly full detail one of the most remarkable cases recorded in psychic science. It may be divided into two parts, the first part having reference to facts which came to pass *after* the prediction, but were published or told to us after they came to pass; and the second, shorter and more vague, concerning facts that were told me and published before they came to pass.

In November, 1913, I had a visit from Dr. Tardieu, a former house-surgeon and then consultant at the Mont Dore Hospital, who had been a pupil of my father's, and said to me, "I have some very important things to tell you. According to certain indications and revelations personal to myself, the time seems come to speak of these things, and I think it necessary to tell you of them now." He then gave me the narrative that here follows in an abridged form; as he gave it, the detail was lengthy:

"In 1868 I left the Medical School, as a young doctor. I had a close friend named Sonrel, a brilliant mathematician and physicist, an astronomical student at the Paris Observatory. One day in July, about 5 P.M., we were conversing as we walked in the Luxemburg Gardens, when Sonrel suddenly stopped, as if in a trance. He spoke, and spoke without heeding anything that I said to him, and without seeing anything round him. He said:

"How strange! I see you in uniform! Yes, you have a military cap and in it you are counting money, and you are on a railway! Where are you going? To Hirson? To Sedan? Oh, my poor country! My country! . . . I, too, am in uniform, a superior officer. Is it possible? I am mortally ill. . . . I shall die in three days, but you are there, you come in time to see me before I die, to watch over my children! Wait now, wait. . . . Years pass. It is a vast war! What bloodshed! God! What bloodshed! Oh, France! Oh, my country! Thou art saved! Thou art on the Rhine! Oh, France, thou art ever the queen among nations! All admire thee!"

I give these words of Dr. Tardieu's from memory; he published them in April, 1914, in the *A. S. P.* I have asked him to correct anything that is inexact, but the version above is that which he gave me in November, 1913. Dr. Tardieu added:

"The whole of this astonishing prediction was realized. At the

end of August, 1870, I was appointed by Nélaton to the charge of a military hospital. I had a military uniform, and having collected money for the wounded at the head of my detachment on the way to the station, I was counting the amount received, in my cap.

"Not till then did I remember my friend's prediction, so that when my comrades asked where we were going I said, 'I know, to Hirson and Sedan.'

"In September, 1870, Sonrel was appointed commandant of engineers; but in the early days of the siege he fell a victim to hæmorrhagic smallpox. I arrived just in time for his last moments. He was awaiting me and kept on saying, 'Tardieu will come; I see him coming.'

"He had married in 1869, had one child, and in September, 1870, his wife was *enceinte*."

Dr. Tardieu added also: "The personal predictions that Sonrel made to me are on the point of being realized, and I presume that the second part of his prediction will come to pass like the first. That is why I come to tell you."

At my repeated request, not without some reluctance, he consented to write out what he had told me verbally, and all these premonitions were published in the *A. S. P.* for June, 1914.

The critical study of this now celebrated prophecy falls naturally into two parts: For the events of 1870, which constitute the first part, we have only the testimony of Dr. Tardieu; but his good faith and sincerity are as unquestionable as my own, or that of Oliver Lodge, or William James. I would willingly admit that defective memory may cause some small details to be inaccurately reported; but the essential facts, the prediction of the war of 1870, and Sonrel's speedy death, were certainly spoken of in the Luxemburg Gardens in July, 1868. Moreover, there is another certain fact—Dr. Tardieu has repeatedly told the story in the same way. Therefore we are dealing with an authentic premonition, very full of detail, and nearly unique in science by reason of this abundance of detail which certainly did not originate in Dr. Tardieu's well-controlled and scientific mind.

The criticism of the second part of the prediction referring to 1914-1918 is of a different kind. There are much fewer details—to speak accurately, there are none. War, bloodshed, the Rhine, victory are not details of events; but the premonition was written and printed before the event, so that there can be no uncertainty whatsoever about its authenticity.

Certainly the political situation in Europe in 1913 was not reassuring; but in November of that year it was perhaps less strained than in 1910, and Dr. Tardieu was induced to come and speak to me, not by the European situation, but by the fulfilment of personal prophecies that Sonrel had made to him and of which he gave me only a very partial and vague summary. Certainly some of the wording of the prediction is very applicable: "What bloodshed! What slaughter! But France reaches the Rhine. Oh, France, queen of nations, all admire thee!"

Another premonition printed before the event in the journal *La Vie Nouvelle,* of Beauvais (Nos. 324, 325), appeared in February and March, 1914; communicated to the paper by the Abbé J. A. Petit, being utterances in trance by a simple peasant girl, who during her trance spoke as if she were Jeanne d'Arc, *the guide of France.* There is much irrelevant matter proceeding normally from the single supposition of approaching war, already apprehended in February, 1914. I quote only the interesting parts:

"In a very short time France will be invaded by enemy masses on the northwest (with respect to Domrémy). Their entry will be victorious by reason of their number and the ignorance of their designs that still prevails in France. When this invasion begins our armies will not be expecting it. The invasion will come by the northwest frontier of two departments, and the invading forces will be so great that they will reach several towns of a third department. It will be necessary to give up these towns. The north and the east will suffer much. The enemy will advance in a straight line parallel to the frontier."

Here comes in the account of a sanguinary battle or series of battles round a fortress (Verdun?). "The enemy will find that place three times as strong as he expected."

"But France is not alone. The violation of *neutral territory has displeased other powers who unite with the French, for it is clear that this violation has been made to take possession of that land and to have a direct passage to the French frontier.*"

I underline the more characteristic phrases of this confused but curious prediction.

"The allied powers will make themselves heard; the enemy will not heed them . . . but will persist in behaving on neutral territory as in a conquered country. The struggle will continue in this small nation and it will be bloody."

After various obscurely worded divagations, there comes:

"The enemy wavers despite the objurgations of the leaders; discouragement is followed by consternation and rout. They scarcely defend themselves; they let themselves be killed. It is the end. The French and their allies unite in laying down the basis for an equitable treaty of peace, desiring to unite all nations in justice and fraternity."

Does this refer to the League of Nations?

The above is an abridged, and therefore mutilated, summary of this interesting premonition. There is not sufficient detail of actual events to produce sure conviction that it may not be due to normal penetration and chance combined; nevertheless, in certain respects there is sufficient accuracy and prevision to give much food for thought. To form a thoroughly well-grounded opinion the original should be referred to. It seems weak, however, in comparison with the Sonrel predictions.

Lady Hester Stanhope received some prophetic communications from a certain French gentleman named Lusteneau, who announced that Aleppo and Antioch would be destroyed by earthquake. In 1822 Mr. Wolff was at Aleppo, and dining one day with Mr. Barker, M. de Lesseps, and M. Maseyk, the Danish consul, a letter from Lady Stanhope to Mr. Barker was commented on with much amusement as she warned Mr. Barker not to go to Aleppo, as the destruction of the city was impending. Some days after there was a terrible earthquake that destroyed Aleppo and Antioch, and caused 60,000 deaths. Mr. Barker had a very narrow escape.[1]

Premonitions of earthquakes are frequent but are generally too vague to count.[2]

Dr. Santi states that a lady of the Roman aristocracy said, on December 2, 1909, that she had seen in a dream the town of Messina destroyed by an earthquake and a tidal wave, and that this catastrophe would take place on the 8th, the 18th, or the 28th of that same month. She wrote to the King of Italy to the above effect a letter which Dr. Santi saw and kept. Messina was destroyed by an earthquake and a tidal wave on December 28, 1909 (Bozzano, 335).

At Nice, during the night of March 5, 1921, Mme. F. dreamed that she was taken into a distant country, arid, deserted, and quite unknown to her, where she could see nothing like what she was

[1]Bozzano, 334, after William Howitt, *History of the supernatural*, ii, 26.
[2]See also the references to the Martinique earthquake in the *A. S. P.*

accustomed to. In her dream her (deceased) father told her she was in Brazil. While looking at the strange landscape she saw people running away in terror, for the earth was torn up on all sides. She told this dream to her husband and to her brother.

On the morning of March 6th the newspapers of Paris and Nice announced (for the first time) that a terrible earthquake in China had caused the deaths of 250,000 persons. Mme. F. could not possibly have had any knowledge of this event on March 5th. Conversation on that day had turned on Brazil, but not on earthquakes.

Is this a case of cryptesthesia or mere coincidence? It is to be noted (1) that Mme. F. never dreamed of seismic convulsions, and (2) that the Chinese earthquake is one of the most serious on record.

The following premonitions are of quite trivial events; their interest lies in the precise details given.

M. Mittelmayer (Bozzano's xxvi), a schoolmaster at Dingolfing (Bavaria), dreams that a peasant returning from early mass comes to tell him that M. F. wishes to take him to Fosthart to a small meeting of ecclesiastics and schoolmasters, and that at the inn there he sees a gentleman take the *Münchener Post* out of his pocket. Mr. Mittelmayer told the dream to his wife. On the following day the dream was fulfilled in every detail. When M. F. came, M. M. told him the dream, but no satisfactory explanation could be found. At Fosthart there was a man reading the *Münchener Post.*

Mr. S. H. (case cxiv), on awaking, saw close to his table a grey-headed man, with his back to the door; he was in his shirt-sleeves, and Mr. H. felt that he knew the man but could not place him. He told the fact to his wife and three employees. He then went to his office, and seeing from a distance someone coming towards them he said to the employees, "Here is my man coming along." This man having entered the office found it very hot; he took off his coat and appeared in his shirt-sleeves as Mr. H. had seen him in the dream.

Mme. A., in a high fever and half delirious, sees a woman bending over her. She sees only down to the waist and is aware of the Christian name Marie; the surname she is unable to read, but ends in *"et."* Two days later she was looking for quarters in the country to rent, and in the little village of Crosnes, *which she did not know,* she found what she desired, and in the same house

another lodger, whom she recognized. "I am sure," she said, "that your name is Marie." Her name was Marie Gallichet (Bozzano, cxvii).

Mrs. Z. had a very vivid dream that she saw herself with her sister in Richmond Park, and that she found on a chair a hatpin with a head like a medal, which she gave to her housemaid. She told the dream, which doubtless led her to go to Richmond, where she found the hatpin and duly gave it to her housemaid.

This case is curious; there is the one most unlikely premonition —the finding of the hatpin. The rest seems to have been determined by the dream itself. The interest of such events does not consist in the importance of the matter referred to. Trivial incidents are often the most curious, by reason of their unlikelihood and the amount of details.

Mme. Albert Richet, my daughter-in-law, tells me the following story: "On Sunday, December 28, 1919, at about 5 P.M., I was in the Paris Metropolitan Railway, going from the 'Pasteur' station to Pigalle. The compartment was full of people, and I was quite normal. At the Solferino station, the train had nearly stopped, when I heard loud cries of distress from a woman and a child in the next compartment behind us, and at the same time, a hubbub as of many people rushing to the place. I got up to look out on the platform for the cause of this tumult, but could see nothing unusual. I asked a lady (unknown) who was in the compartment with me, 'Do you not hear it?' She looked astonished and said, 'No, I hear nothing.' I then realized that the whole had taken place in my imagination. It seemed to me, however (though I cannot be sure), that the train was slower than usual in starting.

"A few moments later we reached the next station (Chambre des Députés), and when the train stopped, I heard exactly repeated all that I had previously heard—the screams, the noise of the crowd, etc. They said that a woman whose child was nearly suffocated by the crowd had screamed. I could see nothing because the people in my compartment all crowded at the door to see what was occurring. This time the train stopped for a considerable time.

"A singular fact is that the unknown lady to whom I had spoken said only, 'It is a premonition,' without further remark. She got out at the next station, Concorde. This is the first time that anything of the kind has happened to me; and though I

often travel by the Metro this is the only time that there has been any such accident. I was much affected by it and the whole details are strongly impressed on my mind."

This case is very clear. There cannot be paramnesia, because the auditory hallucination was spoken of before the event. It can hardly be referred to chance; and finally, the hallucination is quite decidedly subjective.

Two facts of the same kind, but not very evidential, are as follows: A schoolmaster, M. Savelli, of Costa in Corsica, on returning home with a friend, heard cries and lamentations from a house near by. M. Savelli and his friend ascertained that nothing was wrong. On the following day passing the same place they heard the same cries, but this time they were real; a child had been taken with croup and had died.

The other story is told by M. Napoleoni, a retired sergeant-major: Passing at midnight with a friend before two detached houses, they heard hammering. Two days later they were passing again, and heard the same sound, but real. The village carpenter was making a coffin for a shepherd who had died the day before.

Mr. Bowring (Bozzano, cxx) dreamed that he saw his favourite canary dead in its bath, with extended wings. He told his wife, who at once went to look at the cage, and found nothing wrong. Next morning the bird was found dead in its bath with its wings spread out. Some other birds had occasionally been found dead, but always with their wings closed.

Mrs. Johnson (cxxi), who is accustomed to note down her dreams and visions (it would be well if all sensitives would do this), saw herself leaving an empty shop in a strange country, and in the shop a very large red tam-o'-shanter cap such as a buffoon might wear. Some time later she went unexpectedly to the Riviera, and there going into an empty florist's shop she recalled her vision. Before her was a man in the huge red cap—it was carnival time—making her extravagant bows.

The story told by Mr. Tweedale, the astronomer, is very noteworthy. One morning at 4 A.M. he dreamed that he saw a comet in the east just before sunrise. The impression was so strong that he went at once to his observatory, and found the comet, which was invisible to the naked eye. He then went to the telegraph office before it had opened, to make his discovery known. Shortly after the post brought him news that the comet had been

discovered by Barnard and Hartwig (*J. S. P. R.*, November, 1906, 328). Was this a premonition or cryptesthesia?

The next case was communicated to me by Dr. Z., a Fellow of the Medical Faculty. One evening he went to see one of his friends. The friend was out, but his sister, Mme. E., was at home. My colleague was starting on his holiday two days later, and the idea came to him to invite the lady to the Faculty of Medicine to hear a paper read. Then, being alone in Paris, he said to Mme. E., "I will take you to the cinema this evening." They found, however, that the cinema was closed; and walking on, came to the Grand Guignol, where they went in just as the curtain was going up. Soon Mme. E., much disturbed, grasped the hand of the doctor, saying, "It is my dream." She had dreamed that a man in hideous mask, and his cap drawn down over his eyes and with a bottle in his hand, was pursuing her with hostile intent. The piece (*The Mask*) represented an unfortunate man whose face had been so mutilated by an accident that he had to wear a mask and to pull his cap down over his eyes, as in Mme. E.'s dream. Between the acts, Dr. Z., to calm the lady, asked her if she had had any other dream. "Yes," she said, "I saw you coming towards me in a palace, with statues all round." "Just so," said Dr. Z., "that, no doubt, is because you sang the other day that song of Mignon about marble statues."

On the following day, in the Salle des Pas Perdus of the Faculty, Dr. Z., going forward towards Mme. E., saw her again much disturbed. "This was what I dreamed of," she said. "I saw all this—the statues, the railing, and you were coming towards me, just as you have now done."

One interesting element has been omitted from our present classification—the purpose that might be called tutelary shown by some premonitions. Bozzano has a special chapter on premonitions that save from dangers. These are relatively few, and to be fair, we ought also to speak of those which do not save, which are much more frequent. In some cases, however, the premonitory warning has been so unquestionable that one might almost be warranted in the strange inference that an external protecting will had given the caution. This would only be in cases where no subconscious notion can have conveyed any sort of anticipation. In order that any premonition may be recognized as tutelary, the danger against which a warning is given must be quite unforeseeable.

A few cases are given below:

Mr. Wiltshire was awakened very early one morning by a voice calling him loudly and repeatedly. His son heard nothing. The voice was not recognized by him, but seemed agitated; and the impression given was that some misfortune was impending, and that he would be urgently wanted. As he was a cattle-breeder he went out to inspect his stables. There was no one in the settlement but a young female servant who showed much mental distress; she was walking very fast and Mr. W. soon lost sight of her; but he heard cries of distress and was just in time to save her from drowning in a deep well into which she had thrown herself. In this instance the distinct hearing of the voice excludes the notion of coincidence (Bozzano, 381).

The next case was communicated by C. de Vesme to Flammarion, and is remarkable for several reasons. It concerns a premonition publicly given long in advance to several persons. A certain Vincent Sassaroli, the conductor of a musical band at Sartano, announced that the building in which the musicians were to play would collapse. The house belonged to a Canon Bacherini. Sassaroli insisted on a careful survey by a skilful architect. Nothing unusual was found and Sassaroli was ridiculed for his folly and timidity. On the date fixed for the performance he repeated his prediction; they all left the house laughing and mocking the visionary, but they had hardly gone out when the house crumbled down. This memorable event was the subject of a report, certified by all the inmates of the house (Flammarion, 338).

Mrs. X. had a very clear dream that she was driving in Piccadilly, near Down Street, that her coachman fell from the box, and that his tall hat was crushed. On the following day she went driving and in Piccadilly at the corner of Down Street noticed that her coachman was falling backwards, half fainting. She stopped the carriage and the man fell, so that her dream was half realized. Half only, for the hat was not crushed. A serious accident was avoided, writes Lady Z., by the prompt action caused by my recollection of the dream.

4. *Conclusion*

A definite inference arises from these facts, whether they be important or trivial; an inference that no criticism of details can invalidate. It is that premonition is a demonstrated fact.

In certain circumstances not as yet definable, certain individuals (mostly, though not exclusively, hypnotizable persons or mediums) can announce events to come, and give precise details on these events that are not as yet existent; details so exact that no perspicuity, no coincidence, and no chance can account for the prediction.

We are therefore driven to infer that the special, mysterious faculty that we have called cryptesthesia, whose nature and modes of action are unknown, is not only manifested for past and present facts, but also for future ones.

After all, the metapsychic cognition of existing distant facts is so marvellous that cognition of the future is not so very much more extraordinary. A. knows that B., six hundred miles away, is drowned. How can A. know this? We have not the least idea. A. announces that B. will be drowned tomorrow. It is only a little more marvellous. In the whole domain of metapsychic lucidity, so profound is the mystery and so impenetrable the obscurity that a little more or less mystery should not appal us.

Are we then to conclude that time is only a notion of our defective mental constitution, that the future is irrevocably fated, that free will is an illusion, and that there is no moral responsibility? Long discussions might be raised on that text. I shall not enter on arguments that pertain more to metaphysics than to metapsychics, nor allow myself to be led into vain speculation. I shall abide in the domain of strict facts. There are indisputable and verified facts of premonition. Their explanation may or may not come later; meanwhile the facts are there—authenticated and undeniable. *There are premonitions.*

Are these due solely to human intelligence, or to other intelligent forces acting on our minds? It is impossible to decide. We must be content with exact observation of the facts.

And it would be inexcusably rash to affirm, as I have boldly done, that *there are premonitions,* if abundant and formal proof had not been advanced. This abundant and formal proof has, I think, been given.

BOOK III

Objective Metapsychics

CHAPTER I

On Objective Metapsychics in General

The study of collective hallucinations bridges the gap between the subjective and the objective facts.

When two persons see a phantasm and describe it in the same manner, it is difficult to suppose that they have been simultaneously and identically hallucinated.

Thus the fact that there are monitions that are completely and simultaneously perceived by several persons leads us to suppose that there must be some kind of materialization; for it is impossible to understand how several persons can have the same impression if there is no exterior image of any kind. But instances of this are neither sufficiently numerous nor recorded with sufficient care as to make the demonstration complete and rigorous. Experimental methods, however, supplement the inherent defects of the observational method. The large number of experiments conducted with extreme precision which we shall presently describe give decisive proofs of materialization.

Objective metapsychics may be treated under three heads:

1. Telekinesis—movements of objects at a distance and without contact. Sounds and knocks without any visible materialized form.
2. Ectoplasmic forms—materializations of objects, of living figures, and of persons.
3. Haunted houses.

Objective phenomena of a material nature are much more rare than subjective phenomena. Only a very small number of mediums can produce them. Even with these physical mediums the phenomena are often limited to knockings and rappings and do not extend to movements of objects without contact, still less to materializations.

Physical mediums, being exceptional beings, usually become professionals as did the Fox sisters, the Davenports, Home, Eglinton, Mme. d'Espérance, Eusapia, and Marthe Béraud. Some, as Stain-

ton Moses, Linda Gazzera, Stanislawa Tomczyk, and Miss Goligher have developed their faculties in private circles without accepting any emolument.

But in experimenting with either class, the same precautions against fraud must invariably be taken. If I myself had any mediumistic power I should exact the most rigid precautions of the kind; for it is nearly certain that mediums in trance, and especially if the trance is deep, lose all control over their movements, and despite the utmost good faith in their normal state, become liable to deception of the worst kind. Only when control of the medium has been sustained and rigid, can the results of any experiment be held to be valid, whoever the medium may be.

This severity of precaution has a corollary. If an experiment with a given medium has presented seeming fraud, that is not a final reason for irremediably discrediting that medium. The conditions must be made such that all fraud is impossible, even if the medium is suspected. When Mme. Roberts enters a cage of which I alone possess the key, and if I am certain, mechanically assured, of the solid construction of the cage, and that no one can enter the room, once I have assured myself that Mme. Roberts is inside, no devices of hers can have any effect. But if these precautions have not been taken, if some forty persons are in the hall, if the cage has not been made under my supervision but has only been superficially examined by me, and is placed on a stage at a distance, I cannot draw any inference; and my distrust will be enormously increased if the exhibition is paid for. That is quite sufficient to give me the feeling of certainty that Mme. Roberts operates by some clever trick even though I may not be able to discover in what the trick consists.

The numerous occurrences we shall now examine are those in which all trickery has been made impossible.

CHAPTER II

Movements of Objects—Telekinesis

The movement of objects without contact, if not the most important or the most extraordinary, is the most common phenomenon of objective metapsychics. The reactions having a supposedly metapsychic origin are most frequently manifested by the movements of a table or of a needle moving over an alphabet.

(*a*) *Table-Movements*

As far back as the time of Tertullian it was observed that tables with (or without) contact of the hands would give intelligent answers.

The essential point is to know up to what point the movements are due to the muscular contractions, conscious or unconscious, of the person placing his hands on the table. The problem seems quite simple. It is really very difficult.

Assuredly in most cases there is no doubt that movement must be referred to unconscious muscular action. So also, just as a subject, hypnotized or not, whether in trance or awake, writes pages automatically without knowing what he writes, the written matter having, however, a definite sense, he may, by placing his hands on a table, cause it to move at certain letters of the alphabet and thus sustain consistent and methodical conversations that seem to come from an external personality. Nearly always automatic writing and table-answers claim to express the thought of a personality other than that of the subject making the experiment.

It is, however, not open to doubt that in most of these cases, though not in all, these movements are to be explained by the unconscious movements of the subject. His muscles can be seen to contract, and as the least pressure will cause a table in unstable equilibrium to move, no other cause can reasonably be assigned either for table-movements or automatic writing.

The disturbing fact that sometimes leads one to hesitate in drawing this necessary inference is that the table answers as if it was alive; the emotions of the subconscious are faithfully trans-

lated by the kind of movements made by the inert object. This lifeless table seems to have a mind: it hesitates, it shows irritation; it affirms energetically; or it sways solemnly. No one who has not witnessed such séances can imagine how well diverse sentiments can be expressed by the frequency or the forcefulness, the slow, hesitating, vigorous, or gentle movements. It is an actual language, sometimes eloquent and always interesting, and the simple-minded are easily led to conclude that some external intelligence is moving the table.

But this would be a foolish inference. The emotions that one is tempted to attribute to the table are the emotions that agitate the subconsciousness of the medium; and its movements are those which the medium's muscles communicate to it. The phenomenon is one of normal psychophysiology which can be defined as follows:

There are subconscious movements, occasionally very energetic, which may be systematic and claim to belong to a special personality that seems different to that of the medium.

The problem is very far from being an elementary one; and it is a grave mistake to think that everything is explicable by unconscious muscular action. Great movements of a heavy table, when the muscular contractions are almost imperceptible, can hardly be explained in this way; so that in some cases the displacements of the table cannot be referred to muscular contractions alone. Very many times I have seen heavy tables displaced strongly and quickly, when the medium was hardly touching them: they turned, jumped, and went from one end of the room to the other so quickly that it was difficult to follow them, while the medium was only lightly placing one finger on the middle of the table.

Among other experiments of this kind I will quote the following, which is typical: For the experiments I was making at Ribaud Island with Eusapia Paladino I had a square table made measuring one metre each way and one metre high. The legs were pointed so that it would be difficult to raise it with the foot. When Ochorowicz and I saw the table brought by the joiner, we thought it much too heavy (forty-four pounds), but we tried it the same evening. As soon as Eusapia touched this heavy table with the tips of her fingers, it tilted, swaying about, and without the legs being touched at all, it rose up completely with all four feet off the ground. All hypotheses that attempt to explain this by normal mechanics are absurd. There were no hooks or cords. The thing took place in half-light and we held Eusapia's hands and head.

I shall not, however, base any conclusions on these mysterious experiences in which there is even a light contact by the medium; for it is too difficult to differentiate between effects that are due to normal muscular force and those which proceed from metapsychic causes. The principle adopted in these studies is that the normal explanation of every phenomenon is to be adopted unless radically impossible; therefore at the risk of an exaggerated scepticism I shall assume that in all cases when the hands of the medium or sitters touch the table at all, however lightly, the movements are due to unconscious muscular movements.

It is nevertheless probable that in many cases these movements are mainly due to metapsychic forces; but it is impossible to differentiate accurately between the one cause and the other. If there is any contact between hands and table, any other cause than the muscular movements of the medium must be set aside; but when there is movement without any contact at all, then we have true telekinesis. Not tables only, but many other objects are displaced, and sometimes moved from one place to another. I shall give many instances of this, but before entering on such cases, I wish to indicate briefly the conditions under which alone experimentation gives valid results.

Nearly always these movements take place in darkness, and precautions against fraud must be specially severe. There is the more reason to apprehend fraud that the movement of objects without contact is a comparatively rare phenomenon and almost entirely confined to professional mediums.

Subjective phenomena often occur among persons who do not use their powers as a trade, and therefore it is likely that they do not deceive; but as soon as a medium is sufficiently powerful to obtain movements without contact, he is naturally tempted to make a profession of his mediumship, and then the temptation to fraud is often well-nigh irresistible. This is the more likely because, as has already been explained, the medium in trance is often unable to distinguish between muscular movements and metapsychic phenomena. The mental state is abnormal; and in the course of an experiment mediums lose a part of their moral responsibility, their moral consciousness is attenuated, even when, as in Eusapia's case, their good faith in the normal state is obvious.

Hence, in complete darkness, surrounded by credulous and often ignorant persons, partly unconscious of the position of her limbs, the medium is led to trick, to move things with her hands, while

claiming, possibly without intention to deceive, that she has not touched them.

There must, therefore, be absolute certainty that the hands, feet, and head of the medium have been so held as to make any superfluous movement impossible. Tireless vigilance and long practice are necessary to this certainty, for some mediums are in continual movement; their hands are never still. Eusapia, the typical medium for telekinesis, was never still for a moment, and it was necessary to watch that her hands were never free; for as soon as one hand escaped from control she made forbidden movements and attributed to "fluidic hands" effects that were only due to normal muscular movements.

Sometimes, instead of the medium's hands being held, her hands and feet are strongly tied. Sometimes she is placed in sewn-up garments; sometimes a thread is fastened to the finger-nails, or the knots of thread with which the hands are tied are sealed with wax. All these are useful precautions to be adopted according to the nature of the experiment and the psychology of the medium.

It must not, however, be forgotten that although these precautions are indispensable, they tend to reduce the phenomena. Certitude is increased but results are diminished. If very effective séances are wanted, the medium must be left comparatively free. Just as in subjective experiments credulity and blind confidence on the part of the sitters increase the phenomena, so in objective experiments, if the medium is straightly tied up and rigid control exercised, very often the results are slight.

This fact, which I have often observed, will cause sceptics to smile; but yet I think that in this case the sceptics are wrong, and that it is often well to leave the medium comparatively free. But, of course, in such cases unwearied vigilance must be exercised on all that takes place; everything must be closely observed, nothing taken for granted, and the inferences finally drawn must be as rigorous as the conditions of the experiment are lenient.

The best method seems to be: first to leave the medium entirely free so that there may be plenty of facts to judge by, then at the next sitting to impose such checks as seem necessary, and at each successive trial to make the restrictions more and more severe so that in the end it becomes impossible to attribute the movements to normal muscular action. Above all, experiments must be repeated and varied.

A most valuable method of check is by flashlight photography,

the camera being focussed in advance; the exact position of the medium and the displaced object are then clearly revealed.

The medium should, I think, be always warned that a photograph may be taken and even that it will be taken. There is a risk of injury to the health or the faculties of the medium by the sudden and unexpected glare of the magnesium light, during trance.

I have scruples (perhaps exaggerated) about surprising or deceiving the mediums. No doubt, in certain cases, when there is strong proof of the likelihood of fraud prepared in advance, it is allowable to use the flashlight for detection; but as a general principle I think that mediums should be treated with humanity, and that the same good faith should be observed towards them that we expect from them.

Sceptics often put forward an objection that the average man considers final: "Why darkness? If you get nothing in the light it is because the medium uses the darkness for trickery. When you can produce the phenomena in full daylight or in good light I will believe them; till then I shall think everything to be trickery."

This objection is valueless, for two reasons:

1. It seems proved that many phenomena of telekinesis, if not all, do not take place in full light. Everything happens as though darkness were one of the necessary conditions for the manifestation of the power. This is not absurd; there are many physical phenomena that do not take place in the light, as there are others that do not take place in the dark. If a sceptic on photography were to object to the feeble red light by which plates are developed, the photographer could reply that light interferes with the development. So likewise the experimentalist has the right to reply that light interferes with telekinesis.

2. The second reason why the objection is not valid, is that with some mediums, notably with D. D. Home, the movements have been observed in full light, and in very many other cases the darkness has not been so great as to prevent quite satisfactory visual control.

(*b*) *On Some Cases of Experimental Telekinesis*

The phenomena here following are extremely interesting not only in themselves, but because they are of old standing:

John W. Edmunds, a lawyer of reputation and a Supreme Court

Judge, began his enquiries in January, 1851. Not till April, 1853, was he convinced of the reality of the phenomena. He says, "I had recourse to every expedient I could think of to discover imposture and to guard against trickery. . . . I have seen a mahogany table, with a central pillar and carrying a lighted lamp, rise at least a foot above the floor in spite of the efforts of those present to prevent it. . . . I have seen a mahogany chair turn on its side and move backwards and forwards along the floor without being touched by anyone, in a room where at least a dozen persons were sitting, without any of them being touched by it. It often stopped a few inches from me, having been moved so quickly that had it not stopped, my leg would have been much bruised" (A. R. Wallace, *Miracles and Modern Spiritualism*).

We will now consider a few experiments with certain persons that prove movement without contact.[1]

In 1854 A. de Gasparin published a book, *Des Tables Tournantes,* in which exact experiments on the movement of objects and especially of tables, without contact, are reported. "As soon as a vigorous rotation of the table was set up," says De Gasparin, "we raised our fingers while keeping our hands linked so as to form a chain an inch or so above the table, which still continued to make two or three turns. On the following day we were able to induce rotation from a state of rest. Sometimes the movement stopped after a half revolution, sometimes it continued for two, three, or even four turns. . . . On another day, on the hands being removed from the surface, all contact being broken, the small table moved seven times to order."

This book made a stir, and Professor Thury, of the University of Geneva, who had taken part in De Gasparin's experiments, published in 1855 a pamphlet on the relation of these to general physics. He cites the following decisive experiment: "Two persons by themselves, Mme. de Gasparin and Mme. Dorat, drew along a small table without touching it. The table turned and swayed under their hands, held about an inch above its surface. I saw the space between the hands and the table during the whole time and I am certain that during the four or five revolutions made there was no contact whatever. . . . No doubt was possible."

The experiments were confirmed by similar ones made by F. de

[1]On this subject the excellent book, *L'extériorisation de la motricité* (Paris, Chanuel, 1896), by A. de Rochas should be consulted.

Rougemont in Switzerland, and by Hare, professor of chemistry in the University of Pennsylvania (*Experimental Investigations,* New York, 1855).

In 1868, Daniel D. Home, perhaps the most powerful medium known, made some experiments before Mr. Varley, chief engineer of the Atlantic Cable Company, and afterwards before the members of the London Dialectical Society then under the presidency of Sir John Lubbock; and later, before Sir William Crookes. Mr. Varley says:

"In my house, where Mr. Home had never before been, seven feet behind him there was a small table. Mr. Home asked me to hold his hands, and placed his two legs over my left knee. After a few moments the table began to move, and was pushed towards me by an invisible power, no person being near it, and while I was firmly holding Mr. Home's hands and feet. A large couch capable of seating eight persons was pushed right across the room, and obliged us to move aside. . . ." He adds, "Deception was impossible."

The members of the Dialectical Society held fifty séances at which thirty persons were present, and their conclusions were as follows (I give only those which have reference to telekinesis):

1. Sounds appear to come from pieces of furniture, from the floor, and from the walls, often accompanied by vibrations perceptible to the touch, produced without any muscular or mechanical cause.

2. Movements of heavy bodies took place without any kind of mechanical action, often without contact or connection with any person.

3. Thirteen persons depose to having heard well-executed pieces of music from instruments not manipulated by any ascertainable agency.

In one experiment which they declared decisive, eleven members of the society turned the backs of their chairs to the table and knelt on them, feet behind and away from the table, hands resting on the chair-backs. The gas was alight above the table. Under these circumstances the table moved four times, and then, when the chairs had been placed a foot distant from the table, it again moved thirteen times in different directions and in obedience to verbal demands.

Fourteen witnesses depose to having seen hands or faces not belonging to human beings, but which nevertheless seemed alive

and mobile. These were sometimes touched or held so that the witnesses are certain they were not duped or illusionized. Five witnesses certify that they were touched by some invisible being on different parts of the body whilst the hands of all persons present were fully visible.

The members of the Committee (who were for the most part wholly sceptical before carrying out the experiments) declare that they are convinced that "there is a force capable of moving heavy bodies without material contact, which force is in some unknown manner dependent upon the presence of human beings" (*Report Dial. Soc.*, p. 12).

Crookes made very exact experiments with Home, which should be read in the original on account of their leading importance.

He arranged a board on a wooden knife-edge like that of a balance, the board being maintained in position by a spring provided with a scale and indicator. The movements of the indicator could be mechanically registered so as to form a graph. Under these circumstances Home placed his hands four inches above the board, an assistant holding his hands and placing one foot over his feet. A graph was obtained, and in a subsequent experiment, Home being a yard distant, movement with the accompanying graph was again obtained.[1]

Mme. X., observed by Crookes, also produced movements of the indicator. On her placing her hands on a piece of parchment, repeated crepitations were heard in it.

Boutleroff, an eminent professor of chemistry, at Petersburg, made some experiments with Home in 1871. The normal tension of his dynamometer being 50 kg. it rose to 75 kg., the hands of Home being placed on the instrument in such a manner that any effort on his part would have diminished the tension instead of increasing it.

Crookes relates other striking experiences. "My own chair twisted round, my feet not touching the floor. Under the eyes of all present a chair moved slowly from a distant corner of the room. In another case an armchair came nearly up to where

[1] *Researches in the Phenomena of Spiritualism*, William Crookes (*F. R. S.*, 1874). The genuineness of Home's experiences has been impugned, but in point of fact, no slightest proof of fraud has ever been advanced. (See P. Petrovo Solovovo, *On the Alleged Exposure of D. D. Home in France*, *S. P. R.*, xv, 1912, 274.) Moreover, no trickery could account for the results obtained by Crookes, Varley, and Lord Dunraven.

we were sitting and at my request moved back about three feet. On five different occasions, a heavy dining-room table rose from a few inches to a foot and a half off the floor while I held the hands and feet of the medium."

There were also experiments with an accordion which Home held by the finger-ends of one hand in a cage made of wood and copper wire. The instrument swayed about and played different airs. Home then let go the instrument and placed his hand on that of a spectator. The accordion floated about in the cage and continued to play.

M. C., prefect of the Loire, speaking of Home, said: "Home appals me and I can find no explanation, *but I have seen.* He ordered a handbell to climb up my leg, and when I tried to seize it, it eluded my fingers. He ordered a table to answer by raps, which was done; and, more extraordinary still, the raps also came under the soles of my feet. . . . Another time he ordered the table to rise off the floor; it then rose towards the ceiling; he told Mme. B.'s little girl to pull the table down, but each time she let go the table again moved upwards. . . . Then he said, 'Hold fast,' and the efforts of three men could not bring it down" (De Viel-Castel, quot. by Erny, *A. S. P.*, 1902, xii, 147).

"One of the most amazing things I have seen," says Crookes, "was the levitation of a glass water-bottle and tumbler. The room was well lit by two strong alcohol-soda flames, and Home's hands were far distant. The two objects remained suspended above the table, and by tapping against each other answered 'yes' to questions. They remained suspended about six to eight inches above the table for about five minutes, moving in front of each person and answering questions. We verified that Home was entirely passive during the whole time and that no wires nor cords were employed. Home had not entered the room before the séance."

"On another occasion," Crookes says, "I was in a dark séance. I was holding both hands of the medium in one of mine, his feet resting on mine. I had a pencil in my other hand. A luminous hand descended from above, and, having hovered for a few seconds, took the pencil from my hand, wrote rapidly on a sheet of paper, dropped the pencil, rose above our heads, and was lost in the darkness.

"Another time, in the light, Mr. Home was present with some friends, and some sheets of paper and a pencil were placed in the middle of the table. The pencil rose on its point, and after ad-

vancing by hesitating jerks to the paper, fell down. It then rose and again fell. A third time it tried with no better result. After three unsuccessful attempts, a small wooden lath, which was lying near on the table, slid towards the pencil, and rose a few inches from the table; the pencil rose again and, propping itself against the lath, the two together made an effort to mark the paper. It fell, and then a joint effort was again made. After a third trial the lath gave it up and moved back to its place" (*Researches,* Edn., 1874, p. 94).

Another day "the small lath before mentioned moved across the table to me, in the light, and delivered a message to me by tapping my hand; I repeating the alphabet, and the lath taping me at the right letters. The other end of the lath was resting on the table, some distance from Mr. Home's hands" (p. 95).

"To attribute these results to fraud," says Crookes, "is absurd. What I have reported took place in my own house, where nothing could be prepared in advance. A medium sitting in another part of the room with several persons observing him attentively, could not by any fraud cause an accordion held in my hand, keys downward, to play, or make it float about in the room playing all the time. . . . He could not bring an instrument to move the window-curtains, tie a knot in a handkerchief, put it in a distant corner of the room, cause the notes of a distant piano to sound, raise a water-bottle and tumbler off the table, cause a coral necklace to stand up on one end, move a fan and fan the company, or set in motion a clock shut in a glass case firmly cemented to the wall."

These experiments, made by a renowned experimentalist, are so striking and so exact that it is amazing that they should not have been universally accepted. But I will make my confession: Until I had seen Eusapia at Milan I was absolutely sure that Crookes must have fallen into some terrible error. And so was Ochorowicz; but he repented, and said, as I do, smiting my breast, *"Pater, peccavi!"*

Mr. R. Dale Owen narrates an experience (quoted by Russel Wallace, p. 191) in which the medium was probably Home: "In the dining-room of a French gentleman, the Count d'Ourches, living near Paris, I saw on October 1, 1858, in full daylight, towards the end of lunch, a table laden with fruit and wine at which seven persons had been seated rise off the floor, all the guests standing round it without touching it."

The experiments with Home were made under unexceptionable conditions and this gives them considerable value. Mr. E. W. Cox, a serjeant-at-law, holding a high social position and a man of strong good sense, wrote to Home in 1876 as follows:

"My dear Home, in the experiments to which you submitted yourself before me, there was nothing of the nature of precaution or mystery. You sat down near me, anywhere, at any time in my garden, in my house, day or night, always, with one memorable exception, in daytime and in full light. You never refused to submit to any desired control. . . . You sat alone with me and there came to pass things that the united efforts of four men could not have obtained. Sometimes the phenomena took place, sometimes they did not. The results were of such a nature that no human hand could have produced, in my drawing-room, my library, and my garden, where all mechanism was impossible."

Henry Slade, a very powerful American medium, has also given many proofs of movement of objects without contact.

Zöllner, professor of physical astronomy at Leipzig, relates (*Wissenschaftliche Abhandlungen*) that without any visible contact with Slade, a wooden screen, half an inch thick, was violently broken. Direct writing was obtained on several occasions. A metal ball hung by a silk cord inside a glass globe, placed on the table and well lit by the candles, began to swing and to strike at regular intervals against the interior of the globe (evidently without contact with Slade's hands).

P. Gibier also experimented with Slade (*Le Spiritisme,* Paris, 1882. *Le Fakirisme Occidental*).

Gibier first verified the force and frequency of the raps. On one occasion, so strong a knock was delivered on the middle of the table as to lead him to think it must be broken. During this time the feet and hands of the medium were well in sight. In a daylight séance a chair placed forty inches away made a half turn and moved against the table.

"Subsequently in full daylight, a chest placed twenty-five inches away from his chair began to move, leaving the wall so slowly that we could verify that there was no contact between it and any other object; it then came and violently struck the table at which we were sitting.

"At ten different trials the slate held by Slade under the table was broken into several pieces. These slates were framed in very hard wood. We endeavoured to break them in the same way

by striking them against the table, but never succeeded in even cracking them.

"Several times we have seen a framed slate leave Slade's hand, pass right under the table to the other side, and, when taken hold of, give the sensation of resistance as if another hand were holding the slate. We kept the hands of the medium in sight, and could see his two knees outside the table." [1]

Mr. D. MacNab relates some experiments he made with a medium, quoted by A. de Rochas. These were mostly in darkness, which makes control very difficult and necessitates special precautions: but by the light of a red lamp he saw a small table rise from the floor, touch the hands held sixteen inches above it, descend again slowly, and touch the floor without noise.

I now come to experiments with Eusapia Paladino. These are very numerous, and I shall describe a few of them in some detail of which I was an attentive observer, having attended over a hundred of her séances, at Milan, Rome, Carqueiranne, Ribaud Island, and Paris.

As to Eusapia herself: she was a very simple-minded woman, but her simplicity did not exclude a certain shrewdness. She was quite uneducated, could not read, and at the beginning of the scientific experimentation she could only speak the Neapolitan dialect and a little Italian. Being very intelligent she learned to understand French and to speak it a little. She was rather below the usual stature, plump, and had very small hands.

She had an unhappy life. Her father, a Neapolitan peasant, was murdered by brigands: her husband bullied her and made a profit out of her. Generous by nature, she gave much to the poor and spent recklessly all that she earned, and so died in poverty and neglect.

This excellent woman was a remarkable medium, extremely good-natured, lending herself to the most diverse experiments, and was studied by most contemporaneous men of science who cared for such matters; first by E. Chiaia, and then by Aksakoff, Schiaparelli, Lombroso, Gerosa, G. Finzi, Morselli, Brofferio,

[1] I saw Slade once with Gibier. Slade handed me a slate and put a small fragment of slate-pencil on it. I held one end and Slade the other, and we put the slate under the table. In a few moments we heard a noise as of writing. There was some writing and the bit of slate-pencil was worn. But I give this experiment (my only one of the kind) under all reserves; (1) it was long ago; (2) I cannot find the notes I took; (3) Slade's honesty is open to question, and (4) experiments with slates lend themselves to trickery.

Bozzano, Venzano, Carlo Foa, Bottazzi, A. de Gramont, A. de Rochas, J. Maxwell, Ségard, Camille Flammarion, Ochorowicz, Schrenck-Notzing, P. Curie, Mme. Curie, d'Arsonval, Courtier, Siemiradzki, Dariex, Watteville, Sabatier, F. Myers, Sir Oliver Lodge, Mr. and Mrs. Sidgwick, Feilding, Carrington, Herlitzka, Porro, and several others. The bibliography of experiments made with her is large, and is given in Morselli's admirable work, to which I refer readers.

Her séances were at first conducted in full light, then by degrees (so that the phenomena should be more powerful) she asked that the light might be reduced, *"meno luce."* Latterly, the séances were almost in complete darkness, but as control was difficult under these conditions, we used to place a lamp at some distance so that the light should come through a half-opened door or shutters.

Eusapia claimed to be directed by a guide, John King, said to be the brother of Katie King, and the father of Eusapia herself in a previous existence (?). The objective reality of this mediumistic personality is very probably null; it dates from the first experiments with M. Damiani at Naples when he first began to direct her, and especially with Ercole Chiaia, her brave and persevering protector who first made her known to the scientific world by a letter to C. Lombroso, August 9, 1888.

The experiments with Eusapia have not been without their use. All the men of science, without exception, who experimented with her were in the end convinced that she produced genuine phenomena. It is true that at Cambridge she gave a series of semifraudulent séances, because the Cambridge experimenters, R. Hodgson more especially, adopted methods of procedure that made fraud possible and easy, i.e., almost encouraged fraud.[1]

At the moment in an experiment when a movement without contact was about to take place, Eusapia gave warning that a phenomenon was coming, so that these did not occur unexpectedly. The full attention of the observers was awakened and all possible precautions could be taken at the fateful moment that no trickery should be possible. Professors of legerdemain do the exact opposite, and endeavour to distract attention at the crucial moment of their tricks.

[1]Ochorowicz has called attention to this unconscious fraud in a remarkable memorandum in which he shows how greatly Hodgson's method was defective in intentionally leaving one of Eusapia's hands free.

Every movement of an object at a distance seems induced by Eusapia's energetic muscular movements; her arms, her legs, and her body twitch, and everything happens as though the muscular contractions were intended to act at a distance. She is not in trance at the start, but in the course of the séance trance gradually supervenes.

She is not easily hypnotizable. Ochorowicz used to magnetize her after the séances, to induce restorative sleep; for after each séance, often lasting two or three hours, she was much exhausted. The metapsychic phenomena produced by her were very various. There was little or no lucidity, but always objective phenomena, especially movements of objects without contact and materializations. In this chapter I shall speak only of the former.

In this case the essential point, indeed the only point, is to be certain that the movement of the object could not be brought about by the hands, the feet, the head, or the body of Eusapia. The hypothesis that the experimenters were hallucinated is as grossly absurd as to suppose that one of them was playing a practical joke. There was neither apparatus, nor preparation, nor instruments. Eusapia was dressed in a close-fitting black garment without pockets, nor was any object, any cord, or any wire within her reach. If she played any trick it could only be with her bare hands.

All those who experimented with her know this, and therefore their one and only care was to hold her hands effectively.

In this connection I replied to Hodgson: "To say that the hand is held signifies in the first place that one has no doubt of its being the right or the left. If, when my duty was to hold the right hand, I was not absolutely sure that I had the right hand during the production of the phenomenon, I at once stopped the whole by saying 'I have let go the hand,' and the other experimenters did the same. We arranged to hold the hands well, all the fingers in our palms, or the wrist and part of the fingers. At each phenomenon we reminded each other of this necessary exactitude, saying *ad nauseam* a hundred times in each séance, 'I hold the right hand' or 'I hold the left hand.' Our only business was not to let the hands escape. Well, without making extravagant claims to perspicacity or skill, it seems to me that after three months of practice one can be certain of holding fast a human hand."

In a very successful experiment in my house at Carqueiranne, Mrs. Sidgwick held Eusapia's left hand, and my lamented friend,

Fleet-surgeon Ségard, held the right. At the moment that the piano, placed fourteen inches from Eusapia, sounded, I asked him, "Are you sure that you have hold of the hand, the same hand?" and on his affirmation, I said, "Take care, if you are mistaken, it is complicity." In this experiment, Lodge (I think) held the feet. H. Sidgwick then declared the experiment unexceptionable, but that an object held in Eusapia's teeth might strike the keys. I then put my hand over her mouth, all other conditions remaining the same. The notes sounded again.

Instances of the movement of objects, the table and other things, were innumerable.

The first detailed account (Naples, 1891) was given by Lombroso: "Eusapia's feet and hands were held by Professor Tamburini and by Lombroso. A handbell placed on a small table more than a yard distant from Eusapia sounded in the air above the heads of the sitters and then descended on the table, thence going two yards to a bed. While the bell was ringing we struck a match and saw the bell up in the air.

"A large piece of furniture approached us slowly from about two yards' distance; like the creeping of a huge lizard."

At Milan in 1892 in an ingenious series of successful experiments devised by G. Finzi many instances of movements and levitation of a table were verified. In one case, confirmed by photography, the table was maintained in the air for several seconds. This photograph is reproduced in De Rochas's book (p. 48), and it shows that I was holding Eusapia's left hand and her two knees, while Lombroso held the right hand. In one case of complete levitation Aksakoff notes that Eusapia's hands were not in contact with the table at all.

A heavier chair, weighing twenty pounds, a yard distant from the table and behind the medium, approached Schiaparelli.

In darkness the phenomena were much more marked: the knocks in the substance of the table and under it, which were heard in full light, became much stronger—a noise like a heavy blow with the fist on the table; knocks on the chairs, hard enough to cause the chair with the person sitting on it to be twisted round: transport of objects, some from several yards' distance and weighing several pounds; and flight of different things through the air—all these were observed.

Eusapia's feet were on my knees and I held both her hands when a tambourine was raised above our heads, and its surface

struck as though by a hand. Another time, when Eusapia's hands were tied, a handbell was placed on a chair at her right. The light was extinguished with the request that the bell should sound immediately. At once the chair was upset, the bell sounded, and was moved on to the table. Light was restored, and the knots were found perfect. Another time I held both of Eusapia's feet, Schiaparelli and Finzi held her hands while the table was entirely levitated.

The experiments at Rome (1893 and 1894) by Siemiradzki and Ochorowicz were equally evidential. While Eusapia's hands were held, a hand-organ floated over the table, sounding all the while as if the handle were being turned. Once the piano behind the medium was displaced, and its cover was raised. As Siemiradzki had asked that high notes in the treble and low notes in the bass should be struck at the same time, this was done, proving, as he said, the action of two distinct hands. A glass half full of water on the sideboard out of reach of our hands was carried to the lips of Ochorowicz, of Eusapia, and of another person present, who all drank of it. This took place in darkness with marvellous precision. At the same time cracking noises were heard in the wood of the table varying from slight knocks to heavy blows such as might be given by a powerful fist.

At Warsaw, Ochorowicz, holding Eusapia's hands and feet, was careful that not even her clothes should touch the table. In light, dimmed, but still quite sufficient to enable the experimenters to distinguish forms, the table rose horizontally three times into the air, without previous oscillations. Then Eusapia, pushing forward one knee, said, "I will raise the table with my knee," though the table was separated from the knee by an interval of eight inches. The knee was raised six inches and the table eight inches. The same effect was produced when both legs were raised at a distance from the table—the table rose at the same time as the medium's legs.

A dynamometer marked a force three times as great as Eusapia's and in excess of that of the strongest man present.

The following experiments were made in my house at Ribaud Island and at Carqueiranne.

Ribaud Island, where I have a little villa, is a small island in the Mediterranean inhabited only by the lighthouse-keeper and his wife. I brought Eusapia there, and asked Ochorowicz to come for experimentation. For three months we experimented three

times a week, and continually verified, fully, movements of objects without contact and other phenomena to which I shall recur.[1]

After having recounted the success of our experiments, I invited my friends, F. Myers, O. Lodge, Schrenck-Notzing, and Mr. and Mrs. Sidgwick, to come to Ribaud and judge *de visu*. I will give extracts from Oliver Lodge only:

"A chair placed near the window, several feet distant from the medium, slid along, rose up, and struck the floor. The medium was held and no person was near the chair. I heard some notes on an accordion placed not far from us. A musical box was floated through the air and carried above our heads. The key was turned in the lock of the door, laid on the table, and again replaced in the lock; a heavy table (forty-eight pounds) was raised eight inches off the floor, the medium standing up and placing her hands lightly on one corner of the table."

Other séances took place at Agnelas, in 1895, in the house of M. de Rochas, in presence of M. Sabatier, dean of the Faculty of Sciences (Montpellier); of J. Maxwell, Attorney-General at Bordeaux; of A. de Gramont, member of the Institute of France, and of M. A.-C. de Watteville, licentiate of sciences.

The results were the same, more clear, if that were possible, than those obtained at Milan, Rome, and Ribaud.

"The table was raised twelve inches from the floor, Eusapia's hands hardly touching it and sometimes not touching it at all; her knees and feet were held by Dariex, the legs of the table being quite free of all contact with the medium. A little pianola weighing nearly two pounds (nine hundred grams), played a few notes, then rose into the air while Eusapia's hands, feet, knees, and head were firmly held.

"We heard the key of a chest creak in the lock while Eusapia was held as above. A last experiment was very decisive—a letter-balance was displaced and was lowered and raised without contact. The light was strong; there was certainly neither a hair nor a wire there."

[1] I have not published, and shall not publish, these notes; they are wearisome in their monotony; "the hands are held—I am touched on the right—I am touched on the left." To have an exact record I dictated to my secretary, Bellier, who wrote in the adjoining room, all details as the experiments went on, and he noted the exact times. The investigation was long and minute, perhaps unnecessarily minute, but apart from systematic error that I cannot imagine, it established completely the fact of movements without contact.

In fine, the experimenters in their summing up say, Eusapia can act on material bodies at a distance without contact. The control has been as perfect as any control resulting from clear and direct sight of an experimental fact can be.

Experiments at Genoa, 1901. Professor Morselli, who was at first very sceptical, but like all who have experimented with Eusapia, was afterwards completely convinced, gives the details of the facts he observed in a book which is a model of erudition (*Psicologia e spiritismo,* 2 vols., Turin, 1908).

I quote here only what concerns telekinesis, extensive quotation being impossible (p. 361): "In the first two hours of the séance, movements and oscillations of the table: loud noises in the dark or in weak light . . . raps corresponding with muscular contractions or gestures, displacements of objects, sounds from musical instruments, passage through the air of a ruler from the cabinet which touched the arms and shoulders of the sitters—all repeated to satiety. A small table placed a yard away from Eusapia was drawn to her, while I held her right hand and her legs. Mme. Ferrero held her left hand. The table was twice raised six to twelve inches from the floor.[1]

"This experiment," says Morselli, "was controlled with the utmost rigour; everything was visible by red light, and I am certain that the phenomenon is genuine."

In another experiment (1901) Eusapia was held on the left by Porro, on the right by Morselli; the latter said aloud, "I am thirsty." Then a water-bottle and glass were moved on to the table and a glass full of water was put to the lips of each sitter in succession.[2]

Three eminent physiologists, doctors of the University of Turin, Carlo Foa, Herlitzka, and E. Aggazotti, who studied under the celebrated physiologist, Angelo Mosso, held a series of experimental séances in the Laboratory of Psychiatry at Turin

[1]A very good photograph (vol. ii, p. 363) was taken of this; both feet, both hands, and the knees can be seen clear of the table, which is completely levitated.

[2]Those who wish to see all that has been written on Eusapia may consult the *Bibliografia Paladiana* by Morselli (vol. i, pp. 134-170). It will be seen that all the experimenters from 1889 to 1907, with the exception of Mr. E. Feilding and Alice Johnson, were completely convinced. I do not know what Alice Johnson now thinks, but Feilding has recanted his negations founded on the defective Cambridge experiments. D'Arsonval said he could not form an opinion and remained doubtful. I think his uncertainty has now disappeared.

University, and were absolutely convinced of the genuineness of the objective phenomena produced by Eusapia. Objects beyond her reach were several times brought on to the table; graphic recorders placed out of reach of her hands and feet gave records; a heavy and solid table was broken without being touched by anyone; and a photographic plate wrapped in black paper gave the impress of fingers.

Messrs. Foa, Herlitzka, and Aggazotti say with reason (as I have often said, and as seems obvious): "If these phenomena appear strange, it is because of their relative infrequency; they are not more marvellous than the biological phenomena that we daily observe" (*A. S. P.*, 1907, xvii, 294).

Another experiment was made in 1907 by Professor Lombroso, Drs. Audenino and Norlenzki, the editor, Bocca, and other well-known persons. The results were always the same. Registering apparatus placed too far away for the hands of Eusapia to reach them gave records; a mandolin played by itself. The form of a head was seen (*A. S. P.*, 1907, xvii, 212-218). It would seem that under these conditions doubt should be impossible.

Messrs. Berisso and Bozzano relate that in May, 1900, in a fully lighted séance at Genoa when everyone could see Eusapia sitting with her hands on the table under control, objects were transported, notably a trumpet which was seen suspended in the air. Sounds came from it and it was at a greater height than the hands of any person could have taken it. Similarly at the next séance, when a guitar rose three yards above the floor (*A. S. P.*, 1907, xvii, 473-528).

M. Venzano saw a fluidic hand take shape and emerge from the right shoulder of the medium to get a glass full of water and carry it to the medium's mouth. Professors Morselli and Porro were present at these experiments.

At the Psychological Institute, which devoted forty-three séances in 1905, 1906, and 1907 to the study of Eusapia, the report of Courtier (in spite of his hesitations, reticences, and contradictions) ends by admitting that movements seem to be produced by simple contact with the medium's hands, or even without contact; and that molecular vibrations (knocks) in external objects at a distance can be positively asserted. The whole of telekinesis is contained in these two basic admissions (*Bull. de l'Inst. Gen. de Psychol.*, 1909).

In the debate on this matter, Courtier adds the interesting testimony that the objects moved do not follow straight lines, but seem to move in curves as though directed by an intelligent mechanical force.

The Cambridge experiments and the doubts they raised in the S. P. R. may be considered as ineffective. Myers, at a séance held in my house, formally admitted the phenomena as genuine: later in 1909 Everard Feilding, Mr. Carrington, and Mr. Baggally, an expert in legerdemain, made some decisive experiments at Naples. Mr. Feilding, while holding and seeing Eusapia's two hands, was touched behind the curtain by a living hand, three fingers below and the thumb above, and grasped so that he felt the finger-nails in his flesh. These hands occasionally became visible. Mr. Baggally, while seeing and holding the hands of the medium, was touched on the back of his own hand by a hand stroking it and proceeding up his arm (Report of the Commission of the S. P. R. charged with experiments with Eusapia Paladino).

I cannot do better than report textually the remarks upon this medium prompted by the good sense of Mr. Hereward Carrington.

"In November and December, 1908, Mr. Everard Feilding and Mr. W. Baggally and myself held ten séances in our rooms at the hotel under perfect conditions of control, and we were convinced that authentic metapsychic phenomena were produced that no trickery could account for. The conviction produced was quite contrary to my expectations. . . . If there were doubtful phenomena obtained in America the reason was that they did not know how to conduct their experiments with Eusapia, and that she was tired, exhausted, and disturbed. . . . It is my belief that among American mediums for physical effects, 80 per cent. practise trickery; but Eusapia produces genuine phenomena. . . . Every one that studies these problems with her, giving sufficient time and patience, will be convinced that among the phenomena that she presents there are some that no known laws can explain. These facts are beyond question."

Is it necessary to speak of bets on the reality of telekinesis such as that made by M. Le Bon, who passes for an intelligent man? These establish nothing, and science is not advanced whether M. Le Bon wins or loses his wager. Who is going to bet that he will make an aërolite fall in his garden?

I have insisted on the phenomena of telekinesis produced by Eusapia because there have perhaps never been so many different, sceptical, and scrupulous investigators into the work of any medium or more minute investigations. During twenty years, from 1888 to 1908, she submitted, at the hands of the most skilled European and American experimentalists, to tests of the most rigorous and decisive kind, and during all this time men of science, resolved not to be deceived, have verified that even very large and massive objects were displaced without contact.

To report the many experiments mentioned in the spiritist journals on objective phenomena would extend this chapter beyond measure; I merely refer readers to them, only remarking that the conditions of control in such cases are obviously less complete than in those reported above.

Movements of objects without contact have some connection with the phenomena observed in so-called haunted houses. Dr. Dariex has published interesting observations to this effect (*A. S. P.*, 1892, ii, 189-208).

He heard during the night curious and inexplicable noises in his study (No. 6, Rue du Bellay, Paris), and found in the morning that chairs had been upset and displaced. Wishing to deal with this scientifically and judicially, he and four friends, of whom two were medical men, sealed up the door with six seals. Despite this the chairs were noisily displaced in the room though no one could enter either by the window or by the chimney, nor could any wire be introduced under the door.

Dariex was able to observe table-movements without contact, working with Mme. B., a non-professional medium. In the light of a gas-fire turned full on, a table weighing thirteen pounds slid sixteen inches along the floor, the hands of the medium being on her knees, and twenty-four inches distant from the table. Dr. Mercier adds that the table started of itself and that he could not detect the least movement by the medium.

Victorien Joncières, a well-known musician, relates that he went one evening to visit a friend, a highly placed government official, whose young niece had remarkable mediumistic powers. They saw a chair rise above the table; the girl placed her two little fingers on the edge of a very heavy table, "which then rose well above our heads, so that we had to stand up to follow its upward course. It remained poised in the air for a few moments and then descended noiselessly to the floor" (Chevreul, p. 343).

Very marked movements of objects without contact were obtained with Stainton Moses, who was a remarkable medium. He took a good degree at Oxford, was ordained priest, and took a parish in the Isle of Man, and then became a master in University College School. His sermons were highly thought of, and his loyalty and honourable conduct won general respect. He had great mediumistic powers, and in his book, *Experiences in Spiritualism,* he gave the results of his experiences which were remarkable both from the objective and the subjective point of view. Dr. and Mrs. Stanhope Speer, who were his intimate friends, have published careful and valuable notes on all the phenomena.

"The movements of the table begin at once when it is barely touched: it is then best to take the hands away and leave it to itself. The tipping has been more marked when all present were at some distance. It went backwards and forwards on the floor and came back to its usual position when no one was touching it. . . . Sometimes the knocks on it were like hammer-strokes, heard in the room below and enough to make one think that the table would be smashed. Sometimes the whole room was shaken by the blows" (*A. S. P.,* 1895, 211).

Stainton Moses cites the experiment that I give below (abridged) as being conclusive:

"At 6 P.M., in full daylight, as I was with a friend who had come to see me, my dining-room table which was an old and very heavy one, placed on a carpet, was shaken by strong blows. It moved and shivered as if it were coming to pieces, though we were not touching it. We then got up and placed our hands eight inches above the table, which rose to touch the hands."

Another experiment is given on page 219:

"The room that had been illuminated by luminous psychic rays suddenly became dark. The table, touched by no human hand, resounded to a series of knocks of varying force, some like blows of a sledge-hammer, indicating an intelligence that showed itself impatient or serious according to the nature of the communication. The room was in complete darkness except that from time to time a luminous vapour came and went round one of the legs of the table."

"Often," says Dr. Speer, "we heard knocks on the door, the sideboard, and the walls, at a distance from the table where we were sitting. They could not be produced by any human means; I satisfied myself of this by every possible method.

"We got direct writing, and the movement of heavy objects such as tables and chairs was not infrequent; the table being sometimes drawn from a considerable distance off. The table (of solid mahogany) was moved more easily than by our united efforts: we often attempted in vain to arrest its movements."

Dr. Elliott Cowes and Mrs. Cowes relate (*A. S. P.*, 1893, ii, 372):

Round a heavy table under a chandelier with two, three, or four lighted gas-jets (the light being strong enough to read by) all present stood two feet away. There was no contact of person or clothing with the table, nothing nearer than twelve to eighteen inches. Then the table raised one of its legs and let it fall to the floor so heavily that the whole room shook and the gas-globes rang. "If this is not telekinesis," says Dr. Cowes, "we cannot trust our senses."

M. C. de Vesme has seen very clearly marked phenomena of telekinesis with Count Ugo Baschieri (*A. S. P.*, November, 1915, xxv, 261-263).

"I have never," he says, "verified the displacement or levitation of a small table under such good conditions for observation. *Everybody* was a yard distant from the table, which moved towards the medium, but the movements of the table and those of the medium were not simultaneous." Another day, in a quite private séance, at his own house, M. de Vesme saw a carnation placed in a vase of flowers, bend, twist (and in one case), break under the influence of magnetic passes, and M. de Vesme verified that there was no thread."[1]

M. Frémery, an artillery officer, and editor of the fortnightly review, *Tackoustig Leben,* had some evidential experiences at Mme. Huygens's house in presence of Dr. Floris Jansen, director of the laboratory of psycho-physics of Amsterdam, and Dr. van

[1]I saw some cryptesthetic phenomena with Maxwell, De Vesme, and Count Baschieri at my own house, during the war. No premonition worth remembering was given, but a curious thing happened which Count Baschieri considered metapsychic. He placed his handkerchief to his eyes and withdrew it stained with blood, perhaps five grams of blood, undiluted. *His eyes had sweated blood.* I could not discover any conjunctival ecchymosis. I do not make any comments, but only mention the fact, which, physiologically, is quite abnormal, and hardly resembles stigmatizations. I could not affirm the phenomenon to be authentic and not simulated, for, however unlikely, it is possible that the handkerchief was already blood-stained. The movement was too sudden and unlooked for to enable me to observe closely.—C. RICHET.

Branen. There was enough light to see the hands of the medium, which were held by the experimenters. A sofa approached the table and moved away again; a guitar placed five feet above the floor sounded; a palm-leaf moved all ways and floated up to the ceiling, lit by a red lamp; it brushed against the ceiling (twelve feet high) in wide sweeps, then came down again and touched each of the sitters. All the while a musical box played, and gave answers by raps to questions put (*A. S. P.*, 1908, xviii, 251).

At Gratz a non-professional medium, Mme. S., in private séances had very clear tipping and levitations of tables. A very heavy table in massive oak was often displaced, and once while the sitters joined hands, it rose into the air about a yard, swayed a little, and dropped back.[1]

Erny states that from 1865 to 1869 he observed conclusive proofs of telekinesis with the talented composer, F. P. "A table remained poised with one leg resting on a sofa and three legs in the air. All our experiments took place by daylight or in the evening in full light. There was no need to join hands; it was sufficient for P. to place a finger on the middle of the table for it to rise, very often at once, sometimes turning over on him" (A. Erny, *loc. cit.*, 204).

The celebrated Russian chemist Boutleroff experimenting through Kate Fox in his own rooms along with Aksakoff and Mme. Boutleroff, observed movements without contact. Boutleroff was very sceptical and Kate much open to suspicion, but a musical box seemed to wind itself up and started to play. Kate's legs were held by Mme. Boutleroff and her hands were visible on a plate of luminous glass.

J. Ochorowicz has studied telekinesis with great care through the powerful mediumship of a young Polish girl, Stanislawa Tomczyk. I have myself been present at several experiments with her that seemed quite conclusive. The illustrations (Figs. 11-13) show some of the photographs taken. Small objects—a ball, a handbell, a needle—are drawn towards the medium and maintained in the air long enough for a photograph to be taken even in a moderate light.

It cannot be supposed that these objects are held up by a

[1]Nordberg, *Geisterglaube, Spiritismus, und vierte Dimension* (*Psychische Studien*, October, 1918, 415).



FIGS. 11 AND 11A. TELEKINESIS BY STANISLAWA TOMCZYK (AFTER OCHOROWICZ).

1. Raising a pair of scissors.
2. Raising a box of matches.

The negatives are so sharp that if there were a thread it would be visible.

thread, for a ball cannot be balanced on a thread, which would, moreover, appear in the photograph. Stanislawa turns up her sleeves to the elbow, washes her hands in soap and warm water, after which her hands remain always in full view. A commission at Warsaw composed of physicians, physiologists, and engineers carefully verified these facts and despite the furious opposition of Professor Cybulski, who denied the facts while declining to examine them, certified to their entire authenticity.



FIG. 12.—TELEKINESIS BY STANISLAWA TOMCZYK (AFTER SCHRENCK-NOTZING).

The rising of a ball. The fluidic thread, by enlarging (Fig. 13) becomes visible, starting from the nail and showing swellings in its path.

In telekinesis with small objects even in full light, fraud is always possible if the observers are not fully vigilant; for such small objects may be displaced by a thread. Ochorowicz has worked out this question in his experiments with Miss Tomczyk. There are cases in which the object is moved without any thread, and others in which a thread does appear; but this thread is

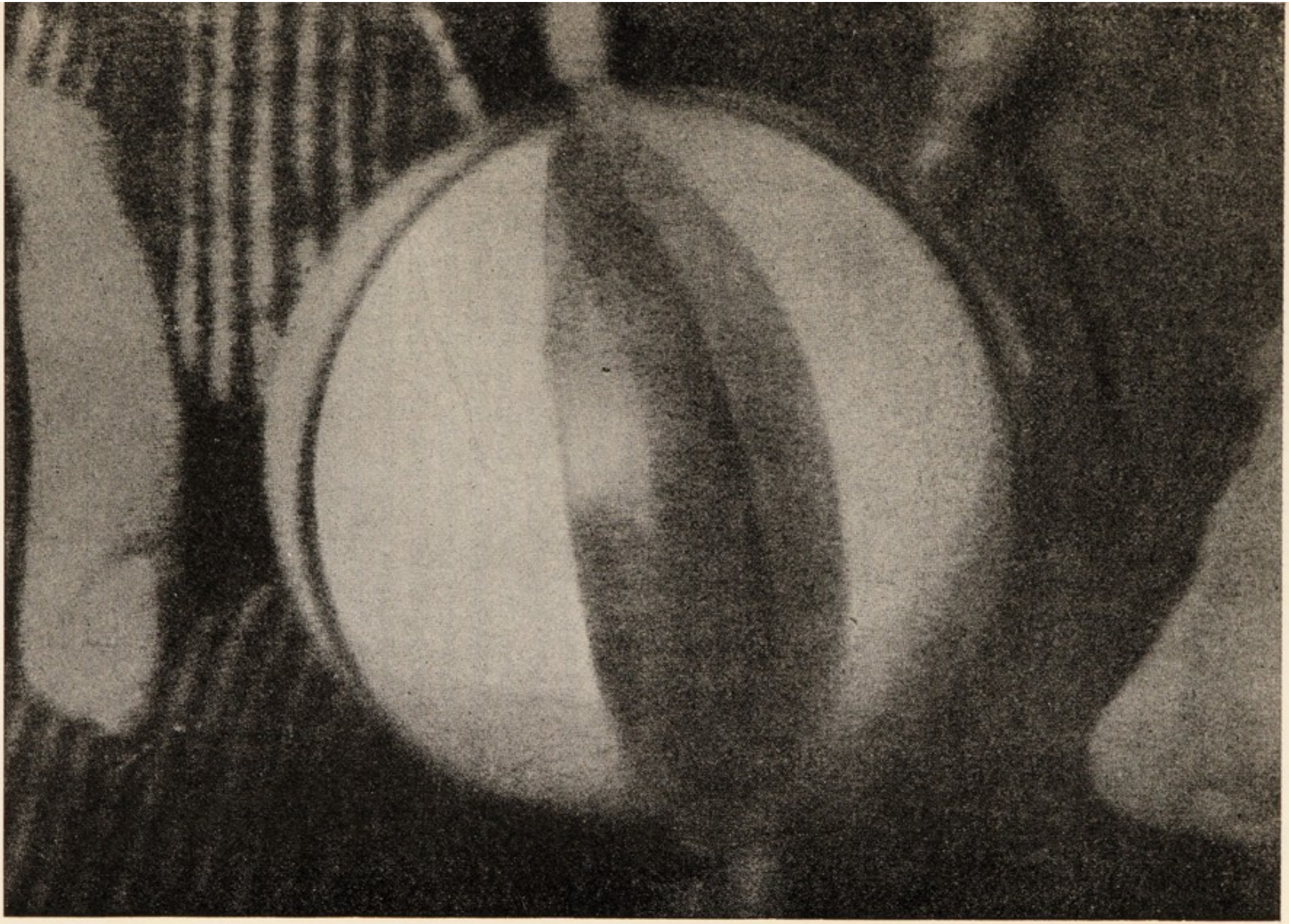


FIG. 13.—ENLARGEMENT OF FIG. 12.

not the hair or fine wire of a conjuring trick, it is a fluidic thread. "I have felt," says Ochorowicz, "this thread on my hand, on my face, on my hair. When the medium separates her hands the thread gets thinner and disappears; it gives the same sensation as a spider's web. If it is cut with scissors its continuity is immediately restored (p. 262). It seems to be formed of points; it can be photographed and is then seen to be much thinner than an ordinary thread. It starts from the fingers. Needless to remark that the hands of the medium were very carefully examined before every experiment" (*A. S. P.*, 1910, xx, 208).

Ochorowicz cites a curious observation made by the Chevalier Peretti with Eusapia at Genoa. A glass having been raised by Eusapia without contact, she cried out, "The thread, look at the thread." Peretti took the thread and pulled it; it broke *and suddenly disappeared.*

This "fluidic thread" should be compared with the fluidic emanations from Marthe Béraud. The minute details given by Ochorowicz should be carefully studied.

Instead of quoting the experiments by Ochorowicz, I will cite those by the Warsaw Committee (*A. S. P.*, 1910, xx, 37):

A celluloid ball, 6 cm. in diameter, was placed in full light on a dynamometer. S. placed her hands two or three centimetres from it and the ball began to roll off the dynamometer on to the table. S. ordered it to return, which it did. There was then another movement. In a second experiment the ball was screened by a large celluloid funnel, but the movement was still produced.

The committee state that the facts are certain, but incomprehensible. Incomprehensible? So be it! But is the attraction by the earth or by a magnet any more comprehensible? We see a leaden ball fall to the earth and a piece of iron attracted by a magnet and we are neither astonished nor disturbed. These are usual, and we give ourselves up to the illusion that we have understood them.

Ochorowicz has verified a case of telekinesis in full light with Miss Tomczyk (*A. S. P.*, 1910, xx, 369): "A chair behind me suddenly moved. It was a garden chair, light, painted red, and quite open in make. In full light it made little forward movements. *I interrogated it.* It raised itself on one side and gave one knock, then advanced a few centimetres. I placed my hand against the chair and felt a slight force pushing it. . . . All took place in full light."

Such facts can be explained only by telekinesis, short of the great absurdity of supposing Ochorowicz the victim of a hallucination.

Dr. Dariex, a careful and experienced observer, experimenting under good conditions with Mme. B., she remaining absolutely still, saw a table weighing some forty pounds give sudden, strong movements, slide along, and upset. Some objects were also projected from a shelf fixed to the wall about eight feet from the floor (*A. S. P.*, 1893, iii, 36).

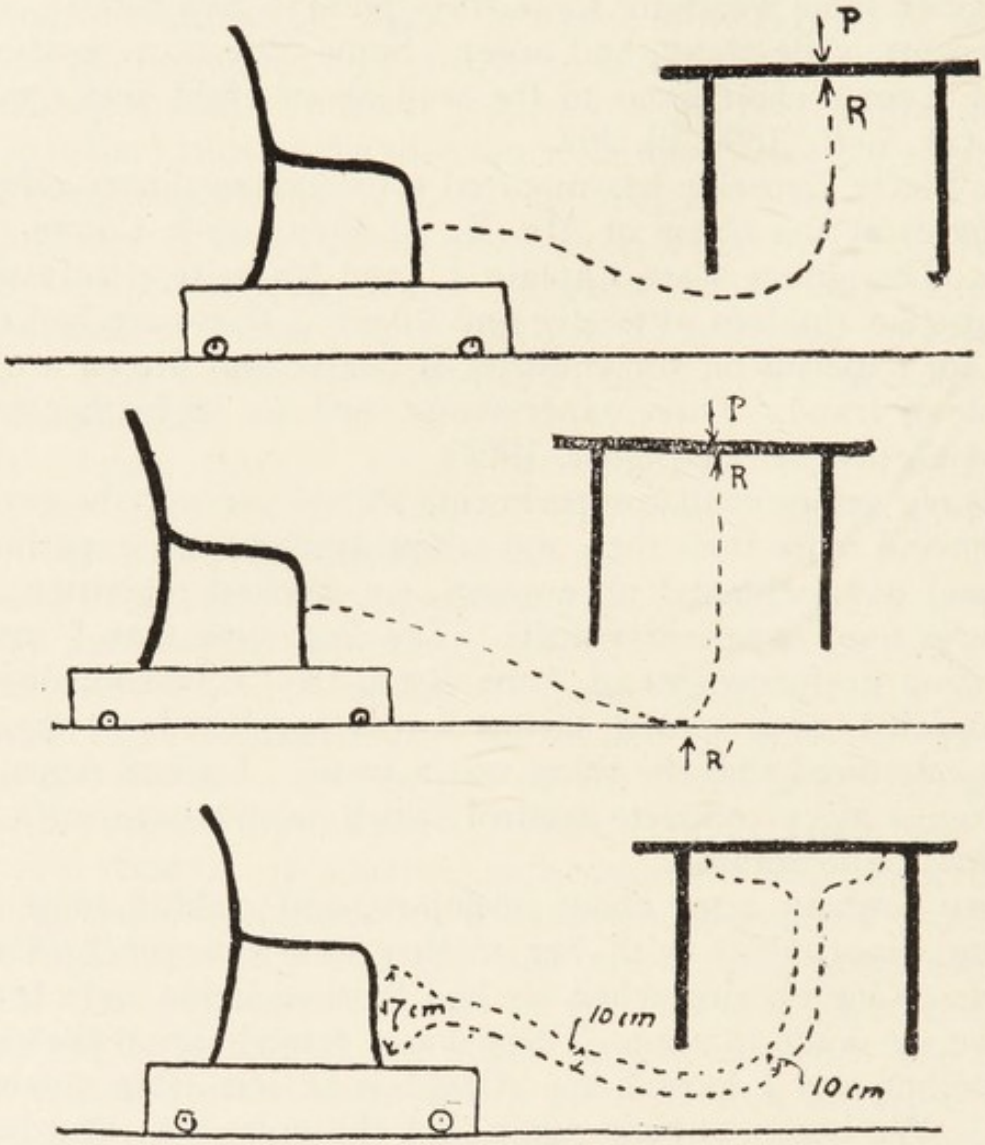
Dr. Pierre Corneille has reported some extraordinary effects of telekinesis at the house of Mr. X., of Fontenay-le-Comte (Vendée). The sitters were Captain L. and his wife, Professor V. and his two children of twelve and fifteen. These are bad conditions for experiment, for children of twelve and fifteen are quite capable of fraud. These experiments need not be further noticed (*Nouvelle Revue,* December, 1907).

It is not sufficient that experiments should *probably* be genuine; we demand more than that, and when dealing with experimentation and not accidental phenomena, we demand repetition. *Experientia una, experientia nulla.* The first time that I saw the surprising performances of Anna Roth, the "Blumenmedium," I was dazzled; at a second sitting I was perplexed; at the third I was convinced that the thing was a fraud. I asked Anna Roth to allow a more complete control which would have settled the question. She refused.

Mary Graham, aged about seventeen, was making some table-turning experiments with her mother and younger brother of fifteen. "One evening when we had finished lights were brought and we sat down to read. There was a scratching on the carpet; my mother and I looked up. Could it be our table moving of itself? We began to read again, but the noise was heard again and I distinctly saw the little table move towards us. My mother also saw that it was displaced; all three of us felt uncanny and took the table out of the room.

"This movement took place a second time. I wished to see what the table would do if I were rude to it; so I took a little terrier lying on the carpet and went to put the dog on the table. I was astounded to see the table jump at me right off the floor! The dog was terrified and ran away. The table had moved about six inches and risen off the floor by about as much" (*A. S. P.*, 1892, ii, 307).

Mr. W. J. Crawford, D.Sc., lecturer in engineering at the Municipal Technical Institute, Belfast, has published an epoch-making book on Telekinesis, *Experiments in Psychical Science* (Watkins, 1919). His lamented death is a great loss to science. In 1916-1917 he experimented in a private circle with a non-



FIGS. 14, 15, 16.—DIAGRAMS TO EXPLAIN THE THEORY OF AN ECTOPLASMIC CANTILEVER (AFTER CRAWFORD).

The dotted lines indicate the cantilever. Miss Goligher is supposed to be sitting on the chair, which is upon the platform of a weighing machine. The extruded substance acts on the table at P, sometimes taking a purchase on the ground, as in Fig. 15, sometimes acting as a cantilever (Fig. 14).

In Fig. 16, the ectoplasm is represented as it generally occurs, enlarged where it proceeds from the medium and where it acts on the table. It is invisible, though it has weight, gives a sensation on contact, and can make an imprint on plastic or coloured substances.

professional medium, Miss Kathleen Goligher. Table-movements were produced without contact of any kind. "I have seen," says Mr. Crawford, "hundreds of these levitations. Sometimes a chair would rise off its four feet and remain in the air for several minutes."

By different instruments that cannot be here described, Crawford measured the forces proceeding from the medium. When she was placed on a weighing machine he found that during the levitation of light objects their weight was added to that of the medium. In other words, the effect as regards weight was as if the medium were herself lifting the objects. Conversely when the table is pressed downwards as if fixed to the floor, so that a strong man can only lift it with much effort, the weight of the medium on the weighing machine is diminished, in one case by thirty-seven pounds, in another case by fifty-nine pounds.

Crawford drew the inference that a rigid rod proceeds from the body of the medium. This is quite conformable to our experiments with Eusapia. By this means heavy bodies can be psychically raised. According to him there are two modes of procedure according to the weight of the object to be raised. "The cantilever method is made use of for light bodies or when the applied forces are small, and the strut method for heavy bodies or when the applied forces are large" (p. 108). It would seem also (as discovered by Ochorowicz and some others) that other sitters also lose weight slightly during the levitation experiments.

No photographs were taken,[1] and precautions such as were used with Eusapia were not taken. But Crawford decided, with good reason, that he would not exhaust his medium; he found that the flashlight greatly disturbed her (p. 147). This prudent conduct cannot be blamed, for he was able to observe the phenomena bv good (red) light, and to verify again and again that there was no contact. He says, "All the phenomena can be demonstrated with the greatest ease to be genuine to the last details."

Decisive value must be given to Crawford's experiments. Next to those with Eusapia and Home, they are the most complete on record. Professor Sir William Barrett, who was present at one

[1]In his subsequent work, *Psychic Structures at the Goligher Circle,* photographs were taken, and are here reproduced. Mr. Crawford personally told me that the effects of the flashlight seemed to be upon the medium herself rather than on the ectoplasm. It was possible to take flashlight photographs if the medium were sheltered from the light by a black cape.—TRANSLATOR'S NOTE.

of these séances, verified that the table moved without contact and that there were raps inexplicable by usual mechanical causes (*P. S. P. R.*, 1919, lxxvii, 335).

We shall refer again later to Crawford's admirable essay, which throws a strong light on the causes and mechanism of telekinesis.[1]

Mr. G. Arnsburg has seen a fairly heavy walnut pillar table rise from the floor (*A. S. P.*, 1892, ii, 352). "Our fingers were held several inches above it. I succeeded in raising the table without contact just as an iron bar is raised by an electro-magnet. The table swayed slowly in the air for several seconds, before falling heavily back to the ground."

I will here mention some unpublished experiments of my own with three other mediums who gave me fairly good instances of telekinesis. Linda Gazzera, brought by my lamented friend, E. Imoda, was in a room in my house with three other persons. Her hands and feet were firmly held, in complete darkness. A heavy chest weighing some eighty kilogrammes, which was about ten inches from her, began to oscillate and crack, being displaced so violently that I feared it would fall, and I had to stop the experiment.

I copy textually from my notes: "I hold Linda's two hands, her head and knees. A hand seemingly from behind me strikes me heavily. I think I can distinguish its fingers, and this is repeated a second time. I hold the left hand firmly, Imoda holding the right which I frequently verified by touch. The objects were taken from the cupboard behind, a thimble was put on the first finger of my left hand, a sheath (*étui*) was put on my nose, and I felt fingers touching my nose and face.

"In the last experiment, the best of any, no one was present but

[1]Crawford's skilful studies lead to a beginning of exact knowledge on the nature of the ectoplasm. His leading facts will be found in his last work, posthumously published, *Psychic Structures at the Goligher Circle* (Watkins, London), of which Mr. S. de Brath has given a very good summary (*Revue Métapsychique*, 1921, i, 191). It cannot be said that the posthumous work contains anything that had not already been established in his previous books, though the photographs in it are new. But in so important a matter fresh verification is always useful, and as the book is posthumous, Crawford cannot be held entirely responsible for its contents and it is wise to maintain some reserve.

It may now be definitely stated that we have abundant demonstration (by Schrenck-Notzing, Mme. Bisson, Dr. Geley, and my own) of ectoplasm as a half-living emanation from the body. (Second French edition.)



FIG. 17.—ECTOPLASM OF LINDA GAZZERA (AFTER CHARLES RICHET AND GEORGE DE FONTENAY)

Experience of April 19, 1905.

De Fontenay at the right, Argentine on the left. I was holding my right hand continuously without interruption. The hand which appeared high above behind the curtain was released by a fluidic thread from the head of Linda. One could see the nails and all the phalanges. Experienced at home in my library.

myself, Mme. Charles Richet, and Mme. F. I held Linda's hands *the whole time* (underlined in my notes), so that I can be absolutely certain that she did nothing with her hands. Mme. F.'s chair was taken from her and removed to the middle of the room, then given back to her; I received a flower that I had placed on a shelf as high as the cupboard hardly to be reached by the hand, and higher than the head. I was touched by something from behind the curtain, though I could not affirm that it was a hand.

"Telekinetic experiments succeed well with Linda and she is more easily controlled than Eusapia, for she scarcely moves at all, while Eusapia is in continual jerky movement. In the first experiments the ectoplasmic hand that I felt was cold and stiff; in the fourth experiment it was warm, articulated, and supple."

J. Maxwell observed occasional movements of objects without contact in the case of a certain medium, A. These were infrequent, but as they took place in full daylight, even when Maxwell only was present, and without the usual procedure of spiritist séances, they could be verified under excellent conditions, leaving no room for doubt.

The one phenomenon shown by A., devoid of all mysticism, was as clear and simple as an elementary phenomenon of physiological physics. A. placed her hands near some object and tried to draw it towards her; and sometimes the object moved a few centimetres. When alone with A. I have seen her thus move a fan. This was in full sunlight on a very warm day. The movement was not strong, but the essential fact is that there was movement.

With A., raps were very distinct; when she placed her hands on a table, a walking-stick, or any bit of wood, crepitations and raps were heard and vibrations were felt.

With S. Tomczyk I have seen good instances of movement without contact; she could move and raise up a light ball from a distance.

These experiments made with three different mediums might have been insufficient to convince me of movement without contact, had I not already formed my opinion after my long experimentation with Eusapia. The clear instances of telekinesis presented by A., by S. T., and by Linda in no way surprised me and strongly confirmed my convictions.

I am even inclined to think that phenomena of telekinesis are

not extremely rare, and have been verified fairly often in spiritist séances, but unfortunately under unreliable conditions. Spiritualists publish nothing that has not a doctrinal bearing or is not dramatic. They make the mistake of attaching slight importance to other facts.

Telekinesis is really one of the most important facts in metapsychic science. It is not to be despised because it is elementary, any more than a chemist should despise the law of combination of oxygen with hydrogen because it is an elementary phenomenon. In any case we may claim to have established the proofs of the reality of telekinesis.

However extraordinary it may seem, the many instances above given establish it as securely as any facts of physics or physiology. It may be defined as follows:

Under certain conditions, movements of objects, even of massive and heavy objects, may take place without contact and without the intervention of any known mechanical force.

Various explanations may be attempted. I will mention in the first place an experiment which physicists have unfortunately not studied at all—the magnetometer of Abbé Fortin. If a piece of paper cut to the shape of a compass needle is suspended by a silk fibre inside a glass cylinder, it will turn either towards or away from a hand approaching the glass. Is this phenomenon electric or thermal? I leave this for physicists to decide.[1]

It is surprising and regrettable that physicists should not have consented to examine carefully this so-called vital action in producing movement.[2]

M. Joire has constructed a very simple instrument that he calls a sthenometer (Gr. σθένος = strength).

This is a needle turning freely on a pivot over a graduated circle, the whole enclosed in a glass cylinder, hermetically closed, and placed on a base which is made truly level. If the hand is

[1]Surbled, *Spiritualisme et spiritisme* (Bibl. des sciences psychiques), 2d edit., 1898, 160. Stenson Hooker, *Sur les radiations humaines, A. S. P.*, 1906, 315. J. Regnault, *Phénomènes odiques et radiations nouvelles, A. S. P.*, 1905, 174. In the journal of Gaston Méry (*Echo du merveilleux*) numerous articles have been devoted to this question which is quite in the embryonic stage, and as uncertain as the theories of the astral body, odic effluvia, human radiations, and magnetization at a distance.

[2]H. Baraduc has imagined that each person has a special attractive or repulsive power; and has written a thick book on the subject, quite sincere and honest, but lamentably deficient in critical science (*La Force vitale, L'âme humaine. Ses mouvements*).

brought near the needle it turns on its axis through a certain angle marked on the dial. M. Joire has been able to eliminate every exterior mechanical cause, the shaking of the floor, any thermal, electric, or luminous influence; and still the movement of the needle takes place.[1]

Unfortunately, instead of establishing the physica of the problem, M. Joire has studied the effect of different states of health as shown by the deflections. This is premature; the physiology of the reaction should come first. If that is established the pathological applications will follow. It is very desirable that the curious experiments, confused and even ridiculous as some of them are, which Baraduc accepts with such simple faith should be taken in hand and pursued methodically and systematically.

Even if they were successful and it were proved that a certain force is exerted by the body, it would not be at all certain that there is any relation between this infinitesimal involuntary force and the large displacements of heavy objects voluntarily produced by mediums. It is possible, of course, but the causes of movement in the two cases are probably totally different.

Since, moreover, interorganic combustion disengages electricity which can be detected by a galvanometer through the tissues of the hands, there is nothing absurd in supposing that the phenomenon may be electrical. Dr. Waller has shown at the Paris Physiological Congress (1920) that emotions produce changes in the electrical conductivity of the tissues of the hand. It is therefore possible, or even probable, that the phenomena of movement without contact produced by approach of the hand to a narrow strip of tissue-paper or a slip of elderpith may be an electric reaction as in Coulomb's balance.

This physical experiment throws no light at all on the movement of a heavy table, or a large melon, a handbell, a piano, or a bottle; for these are certainly not electric phenomena, and have no relation to any known electric phenomena. Although it is imprudent to advance negative conclusions, I cannot think that any solution of this problem of normal physiology will solve the metapsychic problem of telekinesis.

Still we ought not to neglect the important fact that in full light movements of very light electrifiable objects are produced by individuals who have no mediumistic powers.

[1] *Etude* ***d'une force extériorisée por l'organisme vivant, et observations faites au moyen du sthénomètre*** (*A. S. P.*, 1904, xiv, 242-253 et 1906, 752).

Let us leave these small movements and return to the displacements of heavy objects, massive tables, etc.

If the telekinetic phenomena produced by Slade, Home, and Eusapia Paladino are carefully studied, it will be found that they run parallel with materializations, the mediums that give the one give the other also; and already we can deduce from this that there is some relation between these two modalities of strong mediumship.

On going deeper into the matter we find in all three cases that these movements are produced through a human being and do not exceed the limits of average human muscular power. They are produced easily when the object is light, with more difficulty when it is heavy, and are not produced at all when it is very heavy. To say that the force that displaces objects is limited, and approximates to human muscular power, advances the enquiry somewhat, for if a transcendental force were essentially different in its nature from known mechanical forces there would seem no reason that a weight of a ton should not be raised as easily as a weight of an ounce.

With Eusapia there are all the gradations between movement produced by a materialized hand and movement produced at a distance without the hand being seen. When in half-light a heavy blow is heard on the table it is almost impossible not to think it a blow from a fist. But usually the fist is invisible, and in the same séance one experiences touches without being able to see anything. And when a water-bottle is taken, water poured into a glass, and the glass carried to the lips of the sitters, how can we understand these movements otherwise than as performed by a hand?

Let us, then, advance a hypothesis—permissible in face of these strange facts—that materialization takes place in two phases: a first phase in which the materialization is invisible (paradoxical as that seems), but accompanied by mechanical action, and a second phase with visibility and mechanical action. Everything is then coherent, and we may resume the comparison between the projection of mechanical energy and projection of luminous energy hinted at the beginning of this chapter.

We place a hand before a mirror; its image appears. We place a hand above a balance; if the scale is depressed that is the first phase of materialization; *mechanization,* not yet made visible. If the projection of the hand should be more intense the hand will appear to sight, at first unshapen and surrounded by draperies,

but becoming by degrees more distinctively *a hand* than it was at first.

We shall return to this hypothesis when treating of materializations. But whatever hypothesis may be advanced to account for them, the fact of movement without contact is undeniable, and it would be puerile to deny it because it is not understood.

However, although the fact is proven as far as we are concerned, it is highly desirable that a thorough study of the facts should be made anew, separating the phenomena from all considerations but those of cold mechanical physics—a delicate task in view of the mental state of the mediums. Unfortunately these phenomena, very rare when intense, are exceedingly undocile to deal with. A medium seems necessary and results vary from day to day. Darkness, or at least deep shadow, is usually indispensable. These conditions make experiment enormously difficult.

But in spite of these difficulties, the excellent experiments made by Ochorowicz with Stanislawa Tomczyk, and by Mme. Bisson and Von Schrenck-Notzing with Marthe Béraud, and by Crawford with Miss Goligher, confirming what had been suspected by Crookes with Home and by ourselves with Eusapia, have established that movement without contact—telekinesis—constitutes the first stage in materialization. This is a fact of primary importance; Schrenck-Notzing has summed up the evidence that can be adduced in support of this proposition in an excellent book that has just appeared.[1]

In that work theory has no place—which is not less an encomium than a criticism—the facts are set forth in good order, and so well marshalled that they bring conviction.

As to simple telekinesis, the examples already given are sufficient; Schrenck-Notzing adds his own personal observations.

1. Stanislawa Tomczyk gave with him as good results as she did with Ochorowicz. The experiments took place at his own house and he was assisted by Colonel J. Peter, and Drs. Durig, Specht, Francé, and sometimes other men of science. The red light was sufficient to allow all movements by the medium to be well seen. The light was behind her and her hands were examined with a lens. Her arms were bare.

Under these conditions a celluloid ball (like a billiard ball) was moved by her hands being brought near it, a letter-weighing

[1] *Physikalische Phaenomene des Mediumismus,* München, E. Reinhardt, 1920.

scale was depressed, indicating a pressure of 50 grams; one scale of a pair was lowered five centimetres, celluloid balls in a glass were moved about, and a teaspoon in a glass was flung out of the glass without being touched. All these were repeated several times. The hypothesis of fraud is absolutely impossible, for the whole attention of the observers was concentrated on the hands, which remained motionless during the movement of the objects.

2. Eusapia Paladino gave some fine instances of telekinesis. At Munich, in the presence of Professor Dessoir, who was profoundly sceptical, when no contact could possibly take place between Eusapia and the curtain, it moved, and various objects placed behind it moved also. Schrenck-Notzing mentions also the experiment made at my house at Carqueiranne, where a billiard ball was brought on to the table. A lamp placed behind a folding screen allowed of all movements by the medium being clearly distinguished: her feet were controlled by Dr. Beretta; Oliver Lodge and I controlled the right side; Mrs. Sidgwick and Schrenck the left side. In this fine experiment a large melon was transported from one place to another; a musical box played; and a decanter full of water was brought on to the table. Another time, still at Carqueiranne, Eusapia put her two hands on Ochorowicz's shoulder, and the table rose off all four feet about twelve inches for four seconds. Flournoy describes an experiment that he made with Schrenck at Munich, Eusapia being the medium, and says that an invisible force maintained the table in the air and caused it to oscillate without its being touched by Eusapia's hands or feet.

3. Mme. K., the wife of a painter, and a non-professional medium, placed her hand lightly on a piano weighing thirteen hundred pounds; the piano was displaced and one leg rose six inches; Mme. K. not touching the piano with her feet or knees. The light was sufficient to see clearly. Mme. K. only touched the lid of this heavy instrument, the lid opened and shut noisily.

4. Willy S., a young student dentist, aged sixteen, a non-professional medium, gave numerous examples of telekinesis, and these, as in the case of Marthe Béraud, were nearly always produced by ectoplasms.

I have mentioned these cases of Schrenck-Notzing's not only because they are independent affirmations of the reality of the phenomenon, but because I wished to specify, as Schrenck has done, the relation between telekinesis and ectoplasms.

As early as 1895, in the course of my experiments with Eusapia, I had verified that simultaneously with telekinetic movements of objects there appeared barely visible and half-formed stumps, like adventitious limbs, so to say, or efflorescences, for which I proposed the name of ectoplasms, a name now universally adopted. In numerous cases what look like rigid rods have been seen proceeding from Eusapia's body. I have often felt on touching her dress a resistant and mobile but formless object, while her hands and feet were being held unmistakably. H. Sidgwick has verified the same thing, as also Dessoir and Sir Oliver Lodge. Nevertheless these observers were extremely sceptical, almost determined to dispute the phenomena. The American experimentalists, perhaps more sceptical still than Dessoir and Sidgwick, say that on three occasions they have seen strange protuberances seeming to proceed from Eusapia's body (in one case from the middle of her back), which subsequently were reabsorbed into her body. These ectoplasmic pseudopods were screened by the curtain; their form therefore could not be ascertained. On one occasion a rod seemingly about thirteen inches long proceeded from Eusapia's foot, approached the table, touched its top, and upset the objects upon it. The members of the Psychological Institute of Paris—Courtier, d'Arsonval, and Yourjevitch—came to a similar conclusion.

Therefore coincident with telekinesis there are ectoplasms—formation of rudimentary limbs, rods, and more or less visible material forces proceeding from the body of the medium.

The excellent observations by Ochorowicz reinforce these facts. He was able to see and to photograph a kind of fluidic thread by means of which the telekinetic phenomena connected with Stanislawa were effected. These forces, which he calls "rigid rays," can bend and displace and can be directed (according to the will of the medium?) to produce mechanical effects. This fluidic thread cannot always be seen or photographed; but quite probably is in a first phase of its formation when it can move objects, though itself invisible.

These rigid rays seem to proceed from the hands or the fingernails of Stanislawa. Close to her hand they appear like a bundle. They cannot be compared to an ordinary thread, a hair, a silk fibre, or sewing cotton, for along them there are swellings and nodes like the waves in a vibrating cord. Their photographic image is discontinuous. This last is a phenomenon of the greatest

importance; for it absolutely excludes the absurd theory of fraud in these carefully observed cases.

To move a round object such as a celluloid ball, a whole number of filaments surround the object like a net, as if one single thread were insufficient for the purpose (Schrenck-Notzing).

Schrenck-Notzing gives (*pl. V.*, p. 547) an enlargement of the photograph of this fluidic thread. He inclines to the opinion that it is a bundle of fibres, while Ochorowicz thinks that the fluidic thread acts mechanically by a kind of adhesion. Schrenck's observations with Willy agree with those we made with Stanislawa and Eusapia. Using rigorous control, Willy being dressed in a knitted woollen garment provided by Schrenck-Notzing and laced up the back, the phenomena were similar to those produced by Eusapia and by Marthe Béraud. All the sitters felt a hand which displaced objects near by, while Willy's hands were carefully controlled. This hand was felt before it was seen. It had all the appearance of a living hand. It seemed cold and damp, the skin rather rough, and was obviously larger than Willy's hand. Sometimes the fingers were mere stumps. In one case the effect of sudden light was tried; then the white tissue which had formed round the medium's neck rapidly disappeared with a crawling vermicular movement into the black garment with which he was clothed. The care with which the medium had been searched renders the notion that the tissue had been fraudulently introduced into Schrenck's house quite inadmissible, and, moreover, this ectoplasmic tissue had the singular property of spontaneous movement. (! !) In one instance they were able to get a fragment of this tissue into a tube; it moved actively for some time and then suddenly disappeared (*Am* 10 *januar,* 1920, *hatte Kap. K. einen Teil der Substanz bereits in einem Röhrchen aufgefangen. Dasselbe bewegte sich innerhalb des Glases lebhaft und verschwand blitzartig schnell, als der Beobachter die Röhre zu schliessen versuchte*).

The experiments of Crawford show the close relation between telekinesis and ectoplasms better than anything hitherto recorded. All his experiments were made with Miss Kathleen Goligher, a young lady twenty-one years of age, non-professional. The light was from a gas-jet covered with red paper, and was sufficient for all movements to be seen.

At the beginning of the séances raps were heard, light at first, then like hammer-blows, sometimes rhythmic. In some cases the

table was raised forty inches above the floor and, without being touched by anything, swayed about in the air.

The new feature in Crawford's experiments was that he placed his medium on a weighing machine and observed the alterations in weight during levitation. The weight of the medium and chair before the levitation was 136.7 pounds. During levitation the weight increased by 3.05 pounds, the weight of the table raised being 2.64 pounds. With other and heavier tables he obtained similar results; the weight of the medium and chair was increased by the weight of the table.

"Everything takes place," said Crawford, "as if there were a mechanical link" (*invisible?*) "between the medium and the table." It is impossible not to connect these important observations with those verified in connection with Home, Eusapia, and Stanislawa Tomczyk.

The substance that produces these telekinetic movements is a kind of lever, cantilever, or rod which emerges from the body of the medium and is reabsorbed into it (see diagrams, p. 430). It can bend, turn, and direct itself, but cannot act at a greater distance than about a yard and a half. It can change its texture, becoming hard enough to give strong blows, and can lay hold of objects. Its dimensions are variable. It can pass through garments and woven materials if they are close to the body, but cloths, paper, and woven materials at a certain distance from the body prevent the action of the force. Its end can adhere to objects to be lifted as though sticking to them. The composition of the ectoplasm could not be determined, and although it certainly proceeds from the body of the medium, no pressure is felt and no reaction is perceived.

The importance of these extraordinary facts cannot be exaggerated. They have been observed methodically and measured in a rigorously scientific temper. The reality of ectoplasms, in accordance with the phenomena presented by Eusapia, Marthe Béraud, and Stanislawa Tomczyk, has been rigorously proved by these experiments of Crawford's.

He gives in his last work—*Psychic Structures at the Goligher Circle* (Watkins, London, 1921)—posthumously published, some excellent photographs, following up his earlier work.[1]

[1]See also Schrenck-Notzing's remarks on this, *Das Materialisations probleme* (*Psych. Studien*, May, 1921).

The theory that ectoplasms cause telekinesis is probably correct, but in any case, for the phenomena themselves, the proof is irrefutable and ought to carry conviction.

The results given by the different mediums are concordant; each has special personal modes, but the same general scientific inference is to be drawn from the observations as a whole.

It seems fairly well established today that movements without contact must be referred to fluidic projections, at first invisible, that emerge from the body of the medium. The ectoplasms emanating from Marthe, Eusapia, Willy, Stanislawa, and Kathleen Goligher are doubtless analogous to the phantoms that came from Florence Cook, Home, Eglinton, and Mme. d'Espérance. *Telekinesis is the first phase of materialization.*

Scientific investigation should now be concentrated upon investigation of this strange and subtle substance which is capable of purposeful movements and such extraordinary changes. It is a whole new world, still profoundly mysterious, and this world is opened up by metapsychic science to physiology and physics.

We shall enter into some further detail when discussing ectoplasmic forms.

(*c*) *Of Noises and Raps*

Displacements of objects do not usually show any intelligence at work. It would seem that the whole effort of the force in action is expended in producing mechanical effects, as strong and astonishing as may be possible. But it is quite otherwise with the slight noises produced in table or in other objects near at hand. These noises were first heard by the Fox sisters, and were the point of departure for modern metapsychic science. These noises, produced by intelligent forces, have received the name of "raps."

This phenomenon, at once simple and important, occurs when persons are sitting round a table with a powerful medium. There are shocks in the wood of the table, manifest by knocks, sometimes faint, but sometimes loud enough to be heard at considerable distances.

To avoid admitting the telekinetic power that produces raps, a number of ridiculous hypotheses have been advanced, of which nothing now remains. M. Schiff explained the raps by a movement of a lateral muscle attached to the fibula, possible in his own absolutely exceptional case. It would be senseless to think this

general. Mrs. Sidgwick (*P. S. P. R.*, xiii, 145) says that abnormal crackings can be produced by the knee-joint. This also is a most rare exception.

It is, of course, evident that if the medium can touch the table with head, hands, or feet, he can get all the raps he wants. But it is impossible to be certain that the medium is motionless when he is not touching the table!

The raps are produced on contact, but in certain rare cases they are produced without contact, and this is a most essential and basic phenomenon that should be studied with more care than spiritualists, blinded by their wish for miraculous and fantastic phenomena, have given to it. The phenomenon of raps, when unquestionable, is the signal proof that there are forces acting mechanically on things, independently of human muscular contractions. For my own part I consider that this phenomenon, in spite of its simplicity, or rather because of its simplicity, is the most striking phenomenon of metapsychics.

Most frequently, it is true, the raps are produced when the medium is touching the table and they may then be attributed to various causes, but it must not be forgotten that at the moment of hearing a rap *the table vibrates, and a shock in the wood can be distinctly felt.* If the ear be placed to the table and the sitters are silent, faint repeated raps can be heard like a drumming. In some cases they become rhythmic, like a march or other music, though the medium's hand is quite still and sometimes does not touch the table at all.

J. Maxwell was fortunate enough to be able to observe a medium who gave raps in full light, and he studied her very carefully. "I had the raps so often in strong light that I doubted whether darkness favours their production as much as it does other phenomena. Contact between the hands and the table is not necessary in order to obtain raps. I have obtained them very easily without contact. When they have come with contact, one of the most certain ways of getting them without contact is to keep the hands on the table for a while, and then to raise them very slowly palms downward."

Maxwell obtained raps in restaurants and in railway refreshment rooms loud enough to attract public attention. "In one house, celebrated by reason of the man of genius who lived in it, the raps aroused the suspicions of the caretaker. The tonality of the raps is very variable; they may resemble the noise made by a

mouse, by sawing wood, by rapping on wood with the fingernails, or scratching on woven stuffs." Each of the personalities who claim to intervene has his own special mode of rapping.

These raps cannot be due to crepitation of the wood in process of drying, for they are *intelligent*. The singular and marvellous thing is that a table untouched by any person emits sonorous vibrations that are not due to chance but mean something. A kind of conversation can be kept up by this means. If the alphabet is repeated, a rap will be given at certain letters and the sequence of such letters will be found to make a word having a definite meaning. A phrase is thus built up. No matter, for the moment, what is said; it is enough to verify (1) that the raps are not due to muscular contractions or any other movement of the medium, since the medium is perfectly still, or is not touching the table at all; (2) that the raps proceed from an intelligence that has something to say.

Mr. W. J. Crawford thus expresses himself on the subject of the raps obtained by Miss Kathleen Goligher (*Experiments in Psychical Science,* Watkins, 1919). "As soon as the séance begins we hear noises—rap, rap, rap—on the floor near the medium. They become louder and louder, on the table, on the chairs of the sitters. Sometimes they are like hammer-blows, so loud that they can be heard outside, and they shake the floor and the chairs. They can imitate different sounds—the step of a man, the trot of a horse, the rubbing of a match, or the bouncing of a ball."

The facts noted by Hyslop (*Am. S. P. R. Journal,* xiv, 252-257, 1920) are the more likely to carry conviction in that he is not to be suspected of tenderness in handling objective metapsychics. Dr. Creery corroborates the facts. An old, ignorant, and blind negro obtained strong raps by placing his hand without the slightest movement on the table, on a violin, or the door. These occurred also when his hands were not in contact with anything and in full light. The raps could be heard five or six feet away. Hyslop says: "We had fair evidence for the existence of raps under unusual circumstances." Mr. Clawson had even better results with the same man.

The reality of these raps is of primary importance, and this phenomenon carries the implication of the whole of metapsychics. If it is established that mechanical vibrations can be produced in matter, at a distance and without contact, and that these vibrations

are intelligent, we have the truly far-reaching fact that there are in the universe human or non-human intelligences that can act directly on matter. For this reason, I repeat, it is a mistake not to study these rappings more closely; the rather that the phenomenon is not an exceptional one. No doubt very powerful mediums are required to obtain, without contact, loud knocks that convey a precise meaning, but even with relatively weak and untrained mediums raps can be heard. If the ear be placed to the table crepitations are perceptible, rhythmic or not rhythmic, which have no connected sense, i.e., not conveying coherent phrases, nor even words when the alphabet is repeated, but quite sufficient to establish the fact of mechanical vibrations in the wood. I have obtained these vibrations with many different mediums—with my friend G. F., with Stella, with A., and with L. With Eusapia, the raps were not very frequent, but occasionally (though rarely), they were strong enough to shake the table. With A. they occurred not only on the table but on any object she might be holding. It is true that these were mostly incoherent—an irregular and disordered drumming, preventing any connected conversation. To obtain coherent answers an exceptionally powerful medium is required.

With weak mediums the phenomena are sometimes limited to such knocks, and if the connection with the medium is ignored, one may be tempted to fancy the house haunted. Mr. Hyalmer Wijk, of Gothenburg (Sweden), has made a careful study of a case of this kind. Mme. N. Karin, a hysterical patient, but well educated, heard resounding knockings in the house where she was living, for nearly three months; Dr. Brière and Mr. Wijk heard them also. Then they ceased entirely (*A. S. P.*, 1905, xv, 517-551). J. Hyslop, experimenting with Anna Burton,[1] heard raps and is inclined to think them supernormal because they were produced in very varied ways and in very different places, sometimes spontaneously, sometimes on demand by the experimenters. In one case they could be heard at a distance of two yards, while Miss Burton made no movement either with hands or feet. The only possible hypothesis alternative to telekinetic raps is the very unlikely one of collective sensorial illusion of all the sitters (*Journal, S. P. R.*, xv, 1912, 190).

[1]Hélène de C. Verrall, *The case of Anna Burton, Journ. S. P. R.*, xv, 1912, 141.

The following occurrence is very extraordinary and does not fall within the category of other known facts, so that, standing alone, some uncertainty is permissible. Mrs. Davies received a letter from India which she was directed to transmit to Mrs. W. The letter was placed on the mantelpiece. Some time after Mrs. Davies heard clear and loud raps from the chimney-piece. She then placed the letter on another article of furniture. The raps followed the letter. Mrs. Davies's father came and verified this, soon after deciding that the raps came from the letter or from a point so near that they seemed to come from it. This letter announced the death of Mrs. W.'s husband (*P. S. P. R.*, 1907, xvii, 726).

Sir William Barrett adduces a case of rapping[1] which carries complete conviction to any careful reader.

Florrie C., the ten-year-old daughter of a distinguished Irish barrister, having on different occasions produced raps, Sir William tried experiments with her. In some instances the sounds and vibrations were produced from a distance in tables remote from the child. After several weeks of investigation Sir William concluded that all notions of fraud, illusion, or defective observation must be given up. The raps were intelligent, but the intelligence was childish. Florrie also displayed strong telekinesis; a dining-room table to seat twelve persons was raised to a considerable height, one leg only remaining on the floor.

Under equally good conditions with Miss L., Barrett had raps and extensive movements of the table when no one was touching it. One day the table pursued him, as it were, and imprisoned him in his chair without being touched at all. These phenomena were fully reproduced in his own house.

The opinion of F. W. H. Myers carries great weight. This is what he says on the subject:

"Spiritualists affirm that this is a very common phenomenon. I can only say that having taken part in some hundreds of séances, and prepared to note raps, I have often heard them with paid mediums. Experimenting with friends I have often heard crepitations in the table; but only with four or five non-professional mediums, worthy of full confidence, have I heard unquestionable raps answering questions sufficiently well to bring to me the conviction that they were produced by some unknown power" (*Human Personality*, ii, 454).

[1] *On the Threshold of the Unseen*, third edition, Kegan Paul, 1920.

I can entirely confirm Myers's opinion. Unintelligent crepitations are frequent; intelligent rappings are very rare; but the point is to know that the phenomenon, though exceptional, is real; and this cannot be doubted.

It seems to me obvious that progress in metapsychic science is not to be sought in the pursuit of extraordinary phenomena that appeal to the imagination, but in the more modest and less perplexing study of vibrations, intelligent or not, in a table which is hardly touched, or, better still, not touched at all, by the medium.

It would suffice to attach to the board a moderately sensitive microphone with an arrangement for a graphic record. But unfortunately experimenters, and mediums more especially, have no inclination for these arduous and technical experiments. Spiritualists who in their frequent séances have often seen very striking phenomena are more concerned to converse with the dead in rhetorical and sterile phrases than to register the vibrations of a board under conditions of unquestionable precision.

(*d*) *On Direct Writing*

Among the different kinds of movements of objects without contact a separate place must be given to a group of phenomena so rare that they may be considered doubtful. I refer to direct writing. This has no relation to automatic writing. In this latter the medium writes unconsciously, but as his hand holds the pen or pencil it is unnecessary to suppose the intervention of an extraneous and superhuman power, since he writes with the muscles of the hand like any other person.

But in "direct writing" a small piece of pencil is placed on a slate, and after a few minutes the slate, blank when placed in a box or otherwise closed up, is found to have writing upon it; e.g., an answer to a question. Nevertheless, the hands of the medium have been in sight, and there was no darkness except in the box containing the slate and the pencil.

The striking case of direct writing observed by Sir William Crookes with Home has already been quoted; but cases of spontaneous movements of the pencil are most extremely rare. Home's case is nearly unique. The experiment is usually performed in quite another way, as was done by Slade and Eglinton. In their case a small fragment of chalk or slate-pencil was placed between two slates locked together, or on a slate shut in between two small

boards. The whole apparatus was held in the hand and placed under the table. A scratching noise was heard, and on withdrawing the box it was verified that the bit of pencil was worn and that there was writing on the slate.

If the slate has not been lost to sight and the observer is skilful enough to make legerdemain impossible, the experiment is decisive; but detestable trickery is possible.

In a very interesting memorandum, Mr. Davey gives the story of a séance in which he deliberately simulated direct writing on a slate without warning the sitters of his intention to do this trick. The sitters in all simplicity signed a declaration attesting the authenticity of the phenomenon. Mr. Davey had no difficulty in proving want of vigilance and defective observation at several moments during the course of the proceedings.

It cannot be affirmed that all the cases of direct writing presented by Slade and Eglinton were fraudulent, but Mr. Davey's experiment warrants great reserve in accepting any, and the tricks of American conjurers described in detail by Mr. David Abbott justify the utmost distrust of alleged slate-writing.[1]

If the medium (usually a paid medium) is allowed to use his own slates, however blank they may seem, or if he is allowed to hold or even to touch those that have been brought, nothing can be guaranteed, for anything is possible by clever substitution. It is very difficult to certify absolutely and incontrovertibly that the medium has not touched the slates, for a single moment of inattention (and who can be certain that attention has not been relaxed for a moment?) suffices for substitutions to be made. As Mr. Abbott remarks, if the experimenter brings his own slate and the putative medium does not touch it at all, no trickery is possible. But how often has this been done?

Stainton Moses's intense mediumistic power was occasionally manifested by direct writing.[2] Mr. and Mrs. Speer, who assisted Stainton Moses in most of his experiments, placed paper and pencil in a certain room, and locked the door, Stainton Moses being in trance in a different storey of the house. At the end of half an hour they came back to the locked room and found writing on the paper.

[1] *Spirit Slate-writing and Billet tests, Am. P. S. P. R.*, i, 1907, 148-160, 244-254, 413-427, 513-522.

[2] F. Myers, *The Experiences of Stainton Moses, P. S. P. R.*, 1894, ix, 265-275.

In another experiment (*loc. cit.*, 347) some letters were written on a sheet of white paper placed in the table (in a drawer? —TRANSL.). On that day the guide of Stainton Moses, irritated at a proposal to admit some other person to the restricted circle of sitters, struck blows of such power, says Stainton Moses, that "we had the uncomfortable feeling that he could break our heads if he wished." During the following days several lines of writing were found on blank paper put under the table while Mr. and Mrs. Speer held the hands of Stainton Moses (pp. 302, 303, 304).

Mr. Charlton Speer sums up the various experiences as follows: "We have often had direct writing, sometimes on a sheet of paper placed in the middle of the table at equal distance from all the sitters: one of us sometimes wrote his name on a sheet of blank paper previously marked, and we usually found at the end of a séance that a message had been written. Sometimes we placed a pencil near the paper, sometimes some black-lead; in either case the results were the same. Usually the message was an answer to questions; but sometimes there were short communications independent of the questions, or a few words of sympathy."

The spiritualist publications mention many cases of direct writing, but in view of the ease with which frauds can be perpetrated, some doubts may be felt, especially in the case of professional mediums.[1]

M. de Guldenstubbé, with his sister as medium, on August 13, 1856, put blank paper and pencil in a box, and, after half an hour, he verified that letters were written on the paper. He repeated this experiment more than ten times. Later on, he was able to *see* the letters being formed on the paper in the box when its lid was left open. The Count d'Ourche, who was present at some of these experiments, confirms them.

General de Brewern and the Marquis de Planty witnessed the same phenomenon of direct writing on new packets of note-paper, sealed up by the stationer who sold them.

The written words were in Greek, signed by Plato; in Latin,

[1] I mention them, however, with all proper reservations. Delanne, *Recherches sur la médianimité*, Paris, Libr. des sciences psychiques, 1902. Aksakoff, *Animisme et spiritisme*, p. 547, p. 438-455. Stainton Mosés (M. A. Oxon), *Psychography*. Guldenstubbé, *La réalité des esprits et le phénomène merveilleux de leur écriture directe*.

signed by Cicero. We are not to imagine that Plato and Cicero had come; the interest of the experiment does not consist in that, but in the production of direct writing. M. Guldenstubbé's sister, who was the medium, in any case knew neither Latin nor Greek. I mention these cases only to put them on record.

I made with Eusapia one experiment, which was very clear, but which I could never succeed in repeating. At Ribaud Island one evening, in presence of Ochorowicz, F. Myers, and Sir Oliver Lodge, Eusapia gave us the following phenomenon. I think no one will question the competence of the observers:

Eusapia took my right hand and grasped the first finger so that it projected considerably beyond her small hand. She then moved my finger over some white paper as if writing and the trace of my finger appeared in blue chalk. Eusapia held a blue crayon in her left hand raised high in air. The phenomenon took place by the light of a candle placed close to the paper. I can still see, as it were, Myers bending over the paper with his eye-glass and closely following all that took place. The same thing occurred four or five times, the writing being on white envelopes. I am *absolutely sure* that Eusapia's hand did not touch the paper, but only my first finger, on which there was not the smallest trace of blue. The experiment went on for about ten minutes by the light of the candle, the writing being produced both on paper and on our white shirt-fronts. I have not the very slightest doubt of the reality of the phenomenon: (1) The paper was blank; (2) Eusapia could not have touched it; (3) the blue marks were made under my very eyes; (4) this took place within sixteen inches of a lighted candle; and (5) Myers, Ochorowicz, and Lodge were joint observers.

A. de Rochas has testified to an analogous fact with Eusapia, confirmed to me orally by A. de Gramont (*L'Extériorisation de la Motricité,* pp. 140 and 162).

In many experiments on direct writing, phenomena of cryptesthesia take place along with the writing itself, as in the case of Guldenstubbé. But the distinction between the two must be observed even though both are associated in the fact.

Dr. Paul Gibier, an experienced physiologist and a careful observer, testifies:

"We have seen more than a hundred times letters, drawings, lines, and even whole phrases produced by a slight touch on slates held by Slade, and even between two slates with which he

had no contact. We had ourselves bought these slates in a shop in Paris and marked them with our signature. When the writing was produced on one slate only, this was usually done under that corner of the table at which we happened to be. We kept both the slate and Slade's fingers well in view; we ourselves placed the pencil on the slate, but we were never able to get a sight of the moving pencil. The slate oscillated slightly as if by the pressure of the invisible writer" (*Le Spiritisme,* Paris, Doin, 1887).

The experiment that Dr. Gibier regards as perhaps the best is the following:

"I had brought several slates, among others two screwed together, tied with string, sealed, and wrapped in paper . . . I proposed that I should get an answer on two new slates that I had brought in a napkin. I received permission, after having put the traditional little pointer between the two, to sit on my slates. Having then placed them on my chair I sat down and did not let go of the slates till the whole weight of my body bore on them. I then put my hands on the table along with Slade's hands, and I felt and heard very clearly that writing was taking place on the slates with which I was in contact. When this ended I myself withdrew my two slates, and read the following words, 'Slates are difficult to influence; we will do what we can.' The writing was bad, but it was writing, and legible writing. Slade had not touched these slates."

M. Moutonnier has mentioned a writing given him by Miss Bangs of Chicago, which is manifestly fraudulent.

Elliot Cowes and E. Coleman, experimenting with Mrs. Francis of San Francisco as medium, saw *the telekinetic movement of the pencil on the slate.* In certain cases the slate was partially under the table and partially open to sight; in other cases, it was not put under the table but only covered with a handkerchief, and a whole sentence was written under these conditions. It should be noted that Mr. Emmet Coleman is well acquainted with legerdemain.

G. Encausse says that in a séance given by the magnetizer Robert, he has seen in full light and before twenty persons a girl of seventeen cause letters to appear on sheets of paper—verses with the signature of P. Corneille. It seems that on microscopic examination, the writing was seen to be formed by globules of blood. This is, therefore, not direct writing in the usual sense

of the words. P. Gibier was present at these experiments, but I am not aware that he has said anything about them. The evidence of Dr. Encausse can only be accepted with great reserve. Why has this experiment not been repeated?

Dr. Mysz has had examples of direct writing with an ignorant little peasant girl of fourteen, who hardly knew how to write. He describes this experiment as follows—it seems to me very defective:

A wooden box about twelve inches wide, open on one side only, had this side closed by a conical bag of black silk ending in a point. Into a small hole in this point a pencil was introduced so as to leave only the end of the pencil outside. The child only placed her hands on the outside of the box, and a few minutes later the bag swelled out and the pencil began to write. There is no need to say more; it counts for nothing.

Dr. Nichols obtained at his own house good proofs of direct writing with the medium Eglinton. He put a marked sheet of paper in a locked box between two slates, in full light, and writing was produced while he held the box. This was one of Eglinton's usual phenomena.

I made the following experiment with Eglinton a long time ago, so that the details are not clear in my memory, and I mention it, though not attaching any importance to it. I drew a design on the slate so that Eglinton could not see the drawing. The slate was reversed and a small piece of chalk placed on it. I took the slate in my hand, and without letting it go held it under the table, Eglinton holding the other end of the slate. After two or three minutes a curious facsimile of my sketch was reproduced, but I think that a skilful illusionist could have done as much.

Eglinton gave a celebrated séance with Mr. Gladstone in full light with very positive results.

But all these slate-writings are open to suspicion; it is a form of metapsychism very difficult to control.

In conclusion, phenomena of direct writing are very rare. Some, those by Home and Eusapia, seem authentic; but there has been so much trickery and illusion that direct writing must be considered still very uncertain.

In any case, whether it is true or not, it does not affect the reality of telekinesis and rapping.

CHAPTER III

Ectoplasms (Materializations)

(*a*) *On Fraud in Ectoplasmic Experiments*

In metapsychic experiments the possibility of fraud must never be lost sight of. Other sciences do not suffer from this evil; they evolve peaceably, having only material difficulties to face, whereas scientists who experiment with mediums are always liable to be basely deceived. This makes their task one of great difficulty, demanding careful and vigilant attention.

The difficulties that confront research into objective metapsychics and subjective metapsychics are not of the same kind. We have already noted what precautions must be taken against the trickeries, whether conscious or unconscious, that render the study of cryptesthesia so complex—errors of memory, defects in testimony, and paramnesia. We have shown the risk that the experimenter himself, in spite of all good faith, may involuntarily assist the medium. When studying objective metapsychics the precautions to be taken are different, though they must be equally stringent.

Soon after the Fox sisters had started spiritualism, and had begun to make their mediumistic faculties a source of profit, there arose everywhere, but especially in America, persons who began to traffic in it. Everywhere the credulity of the public aroused the cupidity of swindlers. Public séances were held and money taken for entrance at which "spiritualist" exhibitions were given, like performances at a circus or by a conjurer. Phantoms appeared on the stage, and, profiting by the simplicity of the sitters, came down from the platform to be recognized by some unhappy mother who had lost a child.

Shops were opened by "spirit-photographers," who presented to their clients vague faces on the negative which the credulous sitter always ended by recognizing. The medium who organized these exhibitions would also take engagements to give séances at people's houses for high fees.

The better to attract the favour and money of the public, these mediums and photographers pretended to be genuinely scientific researchers, and craftily invested their exhibitions with some vague kind of religion, so that the whole thing became an actual trade—the trade of mediumship, sometimes lucrative, but always dangerous and in any case dishonourable.

This ugly trade and the consequent development of spiritualism was made possible by the fact that very frequently these professionals had at first some real powers, and vestiges of genuine phenomena were admixed with their fraudulent practices.

The number of adherents to spiritualist doctrines steadily increased; journals sprang into being to celebrate the exploits of professional mediums.

These insanities, encouraged by the blindness of the public and by the credulity of some honourable scientific men, brought about an inevitable reaction. In England, and especially in America, a whole literature strained every nerve[1] to unmask the strange simplicity of spiritualists and the perverse ingenuity of professional mediums.[2]

Disgusted by these sham prodigies, and fully informed as to the machinery of fraud employed by these pseudo-mediums, scientific men in America and England obstinately refused to accept the facts of telekinesis and materialization. It became almost an article of faith among them—a faith perhaps as blind as that of the spiritists—that there are no material phenomena.

The affirmations of honourable men, highly placed in public esteem, such as Judge Edmunds, Dale Owen, and even so great a man as Alfred Russel Wallace, were insufficient to outweigh the nauseous impressions produced by the American trade in mediumship.

Even the admirable work of William Crookes (1872) brought no conviction; he, like Zöllner, remained isolated. No one would believe what these two eminent men of science asserted;

[1]I will cite only a few: Abbott, *Behind the scenes with mediums,* Chicago, 1907. Fr. Podmore, *Modern spiritualism, a History and a criticism,* London, Methuen, 1902, 2 vols. Schakleton, *Spookland, a record of Research in the much talked realm of mystery.* Carrington, *The physical phenomena of spiritualism,* Boston, Turner, 1907. Rainaly, *Procès d'un escamoteur,* Paris, 1894. Rémy, *Spirites et illusionnistes,* Paris, Leclercq, 1911.

[2]Morselli quotes the writings of professional conjurers who have unmasked the tricks of spirit-mediums (*A. S. P.*, 1908, xviii, 157, Hopkins, Keller, Snaw, Williams, and others).

it was said that they had been deceived, illusionized, that they knew nothing of legerdemain and had been humbugged.

The Society for Psychical Research, together with E. Gurney, Myers, H. Sidgwick, and Podmore, started with the axiom and fundamental principle that there are no material phenomena, that everything is subjective. But in the forty years from 1880 to 1920 ideas have evolved. Sidgwick died without admitting either telekinesis or ectoplasms. Myers, at first hostile, ended by fully accepting and resolutely maintaining their objectivity. F. Podmore, it would seem, could never resign himself to believe in them, while Sir Oliver Lodge, who at first only recognized the full reality of subjective phenomena, accepts now the objectivity of material phenomena.

By a singular evolutionary process, R. Hodgson, after having cleverly unmasked in India the frauds of Mme. Blavatsky, was completely converted to subjective spiritualism by his experiments with Mrs. Piper; but if Hodgson admitted the incarnations of George Pelham, he would not admit the telekinesis shown by Eusapia. He it was who, at Cambridge, claimed to have exposed Eusapia, while in fact his experiments were deplorably defective, assisting, facilitating, and even provoking the clumsy, unconscious frauds of that unfortunate medium. Hyslop, who succeeded Hodgson at the American S. P. R., refused, like Hodgson, to admit materializations.

This scepticism is comprehensible when one reads the descriptions of the extraordinary séances given by some mediums. Miller, Bailey, Mrs. Williams, Eldred, Sambor, and A. Roth have all been exposed. Eldred had an armchair in which he had collected a whole arsenal of trick "properties." The photographer Boursnell, although he had the support of W. T. Stead, was convicted of cheating. So likewise was the French photographer Buguet, though simple-minded persons, even after his trickeries had been exposed, persisted in believing in the genuineness of these phantoms. Mrs. Williams was unmasked at a séance in Paris; there were found on her various things used to simulate phantoms, as in Eldred's case. Sambor's case is very strange; one of the friends of Petrovo Solovovo was actually his accomplice, though seemingly an honourable man. According to Grasset, Ebstein made up a phantom with a painted doll.[1]

[1]See Paul Mathiex, *Lex faux médiums. Echo du Merveilleux*, 1906, 249.

Bailey, who claimed to make "apports" of living birds, was caught at Grenoble buying the flame-coloured birds that he was supposed to bring from India by magical means. Maddock was condemned for cheating. I was able to show up Anna Roth who brought concealed flowers. Before the séance she weighed one hundred and sixteen pounds, but only one hundred and fourteen afterwards; the weight of the flowers she brought was two pounds. Maxwell[1] cites the very suspicious cases of Mrs. Wood and Lemb.

Haxby cheated impudently. I could heap up cases if need were; and indeed honest spiritualists recognize that these scoundrels are the worst enemies of spiritualism, and all of us who believe in ectoplasms and telekinesis are equally interested in getting rid of these wretches.

But the question is not as simple as it seems: indeed no question is simple when people will condescend to go into it deeply. Along with fraudulent mediums having an outfit prepared in advance, there are true, genuine, and powerful mediums who have recourse to fraud when their powers diminish or they find an experiment fail.

This probably came to pass in some degree even with Florence Cook, with Slade, Eglinton, Eusapia, Linda Gazzera, Marthe Béraud, and Mme. d'Espérance. It is necessary, however, to understand clearly what is meant by the "exposure" of a medium (in French, *démasquer;* in German, *entlarven*).

In the first place, simple rustics like Eusapia do not understand that simulation of a phenomenon is a serious crime; they do not recognize the enormity of the fraud. They say, "People want phenomena; well, we'll give them what they want." A lengthy education is needed before they can be made to understand how odious and unpardonable is a lie that brings wilful error into our poor efforts at truth, where there are so many involuntary errors.

In the second place, mediums are in a state of semi-unconsciousness which takes away much of their moral responsibility. Trance turns them into automata that have but a very slight control over their muscular movements. When a medium is nearly or quite insensible, his eyes shut, sweating and making convulsive movements, unable to answer questions put to him, I do not think he ought to be reproached for anything he may do. He is not himself; he has not that poised and quiet consciousness which can de-

[1] *Les phénomènes psychiques,* 1903, p. 263.

cide between right and wrong. He has forgotten who he is and what he ought to do.

Completely criminal are such acts as those of Eldred or Mrs. Williams preparing paraphernalia for deliberate fraud, hidden in a chair or upon their person; this is radically different from the suspicious movements of an entranced medium.

Not only are mediums irresponsible, but telekinetic or ectoplasmic movements are generally beyond their control. Little Stasia—the guide of Stanislawa Tomczyk—often amused herself by playing tricks on Stanislawa herself to mystify Ochorowicz. Similarly in the case of duplicated personality so well studied by Dr. Morton Prince, the personality A., dissevered from the normal personality B., was actively hostile to B., causing her pain and distress. The ectoplasmic arms and hands that emerge from the body of Eusapia do only what they wish, and though Eusapia knows what they do, they are not directed by Eusapia's will; or rather there is for the moment no Eusapia.

It is also quite easy to understand that when exhausted by a long and fruitless séance, and surrounded by a number of sitters eager to see something, a medium whose consciousness is still partly in abeyance may give the push that he hopes will start the phenomena.

At one of the conversaziones at the Paris Psychological Institute, d'Arsonval told an amusing story of the celebrated electrician Ampère. A new electrical demonstration was being given before a scientific committee, and as the galvanometer needle failed to move at the critical moment, he gave it a touch with his finger. Repeating the experiment, successfully this time, he said triumphantly, pointing to the needle, "This time it goes of itself!"

There is a quasi-identity between the medium and the ectoplasm, so that when an attempt is made to seize the latter a limb of the medium may be grasped; though I make a definite and formal protest against this frequent defence of doubtful phenomena by spiritualists. More frequently the ectoplasm is independent of the medium, indeed perhaps it is always so; though I do not mean to imply that the severance or capture of the ectoplasm can be effected without danger to the medium (?). The case of Mme. d'Espérance (though she was open to suspicion) is on record to show that a medium may incur a long illness by reason of such an attempt.

In view of the known cases of fraud, the question is to decide

what confidence can be placed in the more or less marvellous accounts that are given us.

To sum up the conditions which seem necessary: they apply equally to fraudulent and to honest mediums, if there are any who can always be depended upon. The precautions must be as strict in the one case as in the other, and if these precautions have not been taken no scientific inference can be drawn.

Although Boursnell and Buguet found many disciples, and although there have been many frauds that have been accepted as genuine phenomena, it is consoling to know that fraud always fails in the long run; it cannot defeat prolonged and careful experiment. Fraudulent mediums, as soon as they leave the narrow circle of the credulous, soon find careful observers that unmask them. If they refuse just and reasonable conditions of experiment, that is in itself a just ground for suspicion, and a reason for refusing to make experiments under bad conditions. But even so, under bad conditions, fraud always ends in detection. It is not as difficult as may be supposed to detect trickery; and I do not think that any instance can be quoted of a medium behaving fraudulently for two years without being detected *in flagrante delicto.*

1. The sitters must be few—three, four, or five at most. Even five seems to me too many. Very good observations can be made by one person only; for the hypothesis that the observer is hallucinated is absurd. If six are present, there will certainly be among them some who are inattentive, unskilful, or practical jokers. Each one will have his own fancies and will exact compliances which will disturb the even course of the phenomena.

The good faith of all persons present must be absolutely unquestionable. Petrovo Solovovo was betrayed by one of his friends, and no one should be admitted to an experiment of whose honesty and good sense one cannot be as assured as of one's own.

Further, a certain competence is essential: it is not by any means every one who is capable of observing well; that is, of observing everything that takes place. To hold the right hand of a medium for a whole hour so as to be quite certain that the hand has not been released for a single second is not so very easy, especially if the hand twists about and struggles. The sitters must be such persons as are not liable to fear, nor to weariness, nor (which is rare) to inattention, and who will also leave the experimenter to follow his own line, merely giving their assistance without pretence of directing the experiment.

2. Photographs, impressions on blackened paper, on clay, on plaster, or on paraffin wax have no value in themselves: everything depends on the conditions. There are photographs so skilfully counterfeited that I should make no conclusions at all on any such shown to me unless the circumstances under which they were produced were given with such precise detail as to make all trickery impossible.

If the conditions are unsatisfactory, the very best photographs are valueless as evidence, and I do not care to see them. But if the conditions are unexceptionable, even poor photographs are decisive; they reveal details that may escape the sight. Stereoscopic photographs are more instructive than those which do not show the relief they show relative distances. After the admirable photographs by Schrenck-Notzing, Mme. Bisson, and G. de Fontenay, it is not allowable to study materializations without the help of one or two cameras; but it must always be remembered that the value of photographs is strictly dependent on the conditions of the experiment.

3. The experiments should not be made in a very large room; the smaller the room, the greater the facility of close observation. All the furnishings should be most carefully examined, turned over, and searched; the doors must be locked so that no stranger can come in. No appurtenances or objects of any kind soever must be brought by the medium: a conjurer can do anything he likes with his table, his pack of cards, his chair, or his stick; but if he is given my table, my chair, and my pack of cards, and has no other at his disposal and can make no interchange, he is powerless.

4. Hence arises the absolute necessity that the medium be scrupulously searched, dressed only in garments provided, and never let out of sight from that moment. His every movement should be followed till he is seated. He should then be tied (or not, if he declines this). Then only can darkness be allowed. It matters little that he should be behind a curtain, since he has no mask, no appliance, and no stuff of any kind. If under such conditions a form enveloped in a white veil comes out from the curtain, I shall conclude with certainty that there has been a materialization of a white veil, presuming, of course, that the search has been so thorough that it has been impossible for the medium to conceal any such veil.

The whole point, then, is to know whether one can be certain

whether anyone, medium or no medium, has concealed a large white veil. It seems to me not impossible to ascertain this.

If all the prescribed conditions are fulfilled,—and they can be and have been fulfilled—the experiment is valid.

In some cases all the precautions enumerated are not indispensable. If, for instance in a locked room which has previously been thoroughly searched, a living form is seen moving by the side of the medium, there is no ground for doubt, since no one could have entered. Obviously, then, we have to be sure that the form is not a dummy, and that the entranced medium is not a dummy. When Crookes saw Katie King by the side of Florence Cook, two living beings were both present.

Again, if I hold the two hands of Eusapia in my two hands, and I feel a hand stroke my face, pull my hair, and strike my shoulder, I can be certain that it is not the hand of Eusapia; and I am not going to suppose that Myers, Sir Oliver, or Ochorowicz played such a criminal practical joke on me.

There is, however, a point that seems to me highly important, and I therefore insist upon it. Even if all the precautions above named have not been taken, that is not a reason for refusing to experiment; it is, however, a reason for making special observations in each special case and looking very closely into everything before drawing any conclusions. It is necessary to repeat experiments again and yet again. One séance counts for nothing, two count for very little. To carry conviction I could not be satisfied with less than five or six, or more. At each, one learns something fresh and corrects some defect in the preceding ones. No doubt this is troublesome, difficult, and tedious, but science is not served by single observations; they must be repeated. It may be said that the first time one sees nothing; the second time one sees imperfectly; in a third, one sees fairly well; the fourth time one sees accurately.

For telekinesis the matter is simpler; there is no need of so many precautions to be sure that an object is moved without contact. A good light is sufficient, for in the dark the affair becomes much more complicated. If, however, there is a distinct movement of the object in the light that is in itself sufficient, and enough instances have been given to make it unnecessary to refer to them again.

But for materializations which, with some exceptions, are only

produced in the dark, it is necessary to be very exacting as to the conditions.

Among the numerous accounts published, which are those that are worthy of acceptance?

A primary distinction, which is fundamental, must be made between professional and non-professional mediums; that is, between those who give paid séances to which the public are admitted, and those who do not.

1. It is quite obvious that no séances to which all and any persons are admitted on payment count for anything. However astonishing the cabinet of the Davenport brothers may be it is very certain that this cabinet does not differ from the trunk of metal or even of glass in which Robert Houdin or any other conjurer places a person who has been tied up by the audience. The trunk is covered with a rug, and after a little patter to pass the few minutes required for the trick, the rug is removed, the trunk opened, and the bound man is no longer there but is found untied in another box that was previously empty. This is an amusing trick, like the cabinet of the Davenports, the thought-reading by the Zancigs, by Lully, and others, but is no more scientific than the witches' dance in *Faust*.

Maskelyne and other clever conjurers have taken much pains to show so-called spiritist phenomena on the stage. It is easy for the operators and amusing for the public. By a system of skilfully disposed glasses the magician causes phantoms to appear—he pierces them with a sword and finds empty air: the illusion is complete. But these scenes in no way resemble our experiments: within the four walls of a chamber that has been duly searched a medium who has been undressed and clothed in a black smock can do nothing like that.

Professor Grasset has written a book on occultism,[1] very full of detail. Though he does not believe in any metapsychic phenomena, whether subjective or objective, he makes a great effort to be impartial, and his impartiality compares favourably with the scepticism of the official scientists who refuse even to examine the facts. Neverthless Grasset is certainly unjust; he omits the experiments by Gibier, by Home, and by Florence Cook. He thinks,

[1] *L'occultisme hier et aujourd'hui. Le merveilleux préscientifique,* Montpellier, Contet, 1908.

like the ignorant public, that at the Villa Carmen, the coachman Aresky got into the room, that the experiments with Eusapia were nearly always fraudulent if not invariably so; he thinks Maskelyne right against Archdeacon Colley, though Maskelyne lost his case in a court of law. It is true that the second edition of Grasset's book dates from 1908, and great progress has been made in the last fourteen years and the experiments of the present day in no way resemble conjuring tricks. In some recent cases there seems to me no room at all for fraud.

2. Professional mediums who give private séances, for remuneration, more or less accessible to the public, are not to be trusted much more than those who give public séances. Even if the circle is a limited one, and composed of sincere and honourable persons, it is possible that some of these persons may be childishly credulous. The medium can then do as he likes; the circle believes in him and indeed no one who does not believe in him is allowed to be present. Under plea that the health of the medium must not be imperilled nor the brilliancy of the phenomena impaired, no investigation is permitted. These private séances are not, of course, absolutely of no account, but their results amount to very little, precise conditions being wanting. The best that can be said is that when a paid medium like Mme. Salmon with P. Gibier gives a series of séances before a small number of experimenters, in a room that does not belong to her, and submitting to rigorous conditions, safe conclusions may be drawn, though still under distinct reservations. When Miller came to Paris he would not accept the conditions imposed; nor would Bailey, nor Anna Roth.

For my own part I am inclined to think that the notable professional mediums have some real powers, for if they had not, they would never have chosen this singular profession. They are generally very ordinary men and women who have discovered in themselves strange capabilities which surprise them at first, and then are turned to a source of profit and made into a trade. The Fox sisters did this from the very beginning of their surprising manifestations.

It is therefore a mistake to neglect professional and paid mediums under the pretext that they make a trade of mediumship. They have to live, and it would be very unjust to reproach a medium for not giving time and health gratis. A medium has a right not only to considerate treatment but to payment, and this

payment is no more to be condemned than that accepted by a physician who cures us or by a musician who teaches us music.

Powerful professional mediums are exceedingly few, though there are many who have some moderate powers. In all countries there are now private spiritist séances, to some of which it is exceedingly difficult to gain access, at which some man or woman endowed with certain powers gives regular séances to a small group of initiates. The number of such spiritualist circles is difficult to estimate; there are probably many more than is usually supposed.

The phenomena are sometimes very striking, but the credulity of the circle is such and the imprecision of observation so great, that these phenomena are lost to science. They are talked of here and there inaccurately, imperfectly, and without the needful detail. In order to judge of them fairly we must go to such incomplete accounts as are published, and these ought to be very strictly criticized. If all that is printed were accepted, to what illusions and follies should we not be committed; if all is rejected we may be neglecting important essential facts, useful to the advance of metapsychic science.

Fortunately when a medium is very powerful he soon gets a reputation, perhaps in spite of his own desires and those of his own circle: really striking and dazzling mediumship cannot remain secret. It is then the duty of experimentalists and men of science to make researches. Then experiments can be carried out scientifically like those conducted by Imoda, Schrenck-Notzing, and Mme. Bisson, by Crookes and Varley, by General and Mme. Noel, and numerous other observers such as A. de Rochas, Lombroso, Finzi, Morselli, Foa, Oliver Lodge, Dariex, Maxwell, Schiaparelli, Ochorowicz, Bottazzi, who experimented with Eusapia, and Ochorowicz, with Stanislawa Tomczyk.

A true account of materializations is specially difficult because of all experiments it is these that most lend themselves to fraud. Thinking that they have a spirit before them, credulous persons lose their presence of mind; they are inclined to accept everything and to be indignant at precautions to avoid trickery. For my own part, having seen many materializations, I can declare that I have never felt the very slightest awe. My only preoccupation, and one that filled my whole being, was always not to be duped; and I found it hard to understand the emotion of some sitters when they have witnessed a good materialization.

Since fraud is the great danger in all such experiments, every

possible precaution must be taken against it; the medium must be under the closest observation from which nothing distracts the watchers, all his clothes must be searched minutely, as also every object within his reach; no medium who has once been detected in gross fraud should ever be experimented with; photography should be used to show the exact conditions under which the apparition has occurred; the experiment must be often repeated; the control must never be relaxed; and the idea that the medium may be making efforts to deceive never be lost sight of and should dominate the mind of the observers.

The only decisive proof is to be able, after making quite certain that no stranger can have entered the séance room, to see, to touch, and especially to photograph the medium and the apparition on the same plate. Experiments of this kind are very few; it is therefore desirable that there should be more of them. Unfortunately, materialization is a phenomenon that few mediums can present with such perfection that both medium and apparition can be photographed on the same plate.

However, even when for various reasons it is impracticable to have the photographic confirmation which gives certainty, very good proofs can be obtained; and among these I will cite the following, which, after mature consideration, seems to me perfectly valid.

At Ribaud Island, experimenting with Eusapia in company with Sir Oliver Lodge, Frederic Myers, and J. Ochorowicz—three observers whose competence and honesty cannot be called in question—I held one of Eusapia's hands firmly in each of mine. I then felt a third hand touch my shoulder, my head, and my face. This was not in darkness; there was a lighted candle in the room.

All kinds of absurd hypotheses must here be eliminated: first that I was hallucinated—that is, disposed of by the fact that the slap on the shoulder given by "John King" was heard by all present; then that Myers, Lodge, or Ochorowicz should have perpetrated this bad joke; then that I had let go one of Eusapia's hands, which could not be, for my friends could all see her hands held far apart, one in each of mine. Further, the same phenomenon of the materialization of a hand while Eusapia's hands were held separate by one person has been observed by Oliver Lodge, by Myers, and by Ochorowicz.

I will cite, later, other cases of materialization equally decisive; I mention here only this one which seems to me to defy criticism.

It is interesting to study the conditions under which materializations are produced:

Firstly the need of darkness. For one reason or another, none, or scarcely any, are produced in full light. This does not apply to Home who gave astonishing materializations in the light; but in most cases darkness is essential. Sometimes red light, such as is used by photographers, can be used, and when the medium is very powerful flashlight photographs can be taken. Nevertheless, darkness is usually so necessary that the medium must be protected by a curtain, notably at the beginnings of the phenomena. Only behind this curtain, even when the room is darkened, can the preliminary changes take place. This will cause sceptics to smile; but in point of fact what does darkness matter? Can darkness create a living face and produce a white veil?

As for the necessary physiological conditions, these are so inconstant, irregular, and fugitive that they cannot be indicated with any precision. Before the séance it is impossible to know whether the medium is in a satisfactory state to produce the phenomena or not. On one day the results will be excellent, and on the next, under the same conditions, nothing may occur.

Further, a considerable time, often a long time, is needed before anything appears; it may be necessary to wait for an hour, two hours, or even three hours before there is any manifestation. Sometimes, though seldom, the appearances begin as soon as the curtain is drawn. The materialized object is nearly always a shape of something human—a phantom. Sometimes, as with Eusapia, only a hand; sometimes, as with Florence Cook and Marthe Béraud, they are entire figures. Although the appearance of a whole figure is more dramatic than that of a stump taking shape behind a curtain, both phenomena are essentially the same. A warm, supple, resisting, articulated, and apparently living hand identical with a human hand in all points is not more extraordinary than a human personality that looks, walks, and speaks. The difficulty is the same: the abyss between normal and metapsychic science is as great whether there be the big, half-formed hand of John King behind the curtain or Bien Boa rising from the floor in front of it.

I shall not waste time in stating the absurdities, almost the impossibilities, from a psycho-physiological point of view, of this phenomenon. A living being, or living matter, formed under our eyes, which has its proper warmth, apparently a circulation of

blood, and a physiological respiration (as I proved by causing the form of Bien Boa to breathe into a flask containing baryta water), which has also a kind of psychic personality having a will distinct from the will of the medium, in a word, a new human being! This is surely the climax of marvels! *Nevertheless it is a fact.*

The criticisms that have been directed against my experiments and those of Crookes and of Stainton Moses are entirely ineffective. All that can be seriously alleged against them is that the phenomena are so exceptional that if they have been thought to be substantiated the experimenters must have been the dupes of an illusion.

I do not think this objection well founded. Crookes observed Katie King for a long time; Eusapia lent herself with admirable goodwill for twenty-five years to scientific investigation, even when it took absurd forms. More than thirty very sceptical scientific men were convinced, after long testing, that there proceeded from her body material forms having the appearances of life, which I shall describe farther on under the name of ectoplasms. Marthe Béraud, as good-natured as Eusapia, has been experimented with by General Noel, by G. Delanne, and myself at Algiers, by Schrenck-Notzing, J. Maxwell, Mme. Bisson, Dr. Geley, Dr. Bourbon, and many others. Home gave extraordinary phenomena of materializations for twenty years, verified by most illustrious personages, without ever having been detected in trickery.

The alternative, then, is that the phenomena are genuine or that they are due to fraud. I am very well aware that they are extraordinary, even so monstrously extraordinary that at first sight the hypothesis of immeasurable, repeated, and continual fraud seems the more probable explanation. But is such fraud possible? I cannot think so. When I recall the precautions that all of us have taken, not once, but twenty, a hundred, or even a thousand times, it is inconceivable that we should have been deceived on all these occasions.

It is true that some scientists say, "I do not want to see or to study these things, for I know beforehand that they are not possible, therefore *a priori,* you have all been taken in by impostors."

This, however, involves two inadmissible assumptions. In the first place, it is not sufficient to say, "You have been deceived"; it is necessary to show how we have been deceived. When I hold both of Eusapia's hands and a third hand touches my forehead

and my shoulder, how can this miracle have taken place? Tell me that, and I may revise my opinion; till then it is unshakable.

In the second place no one can rightly say *a priori* "It is impossible." Human knowledge is so uncertain, so limited that the word "impossible" should never be used.

I say that under certain exceptional conditions—and I admit that these conditions are extremely exceptional—the semblance of a living hand is formed which has all the properties of a living hand and seems to belong to a being similar to a human being (!!). The new data contradict absolutely nothing that is taught us by science. It is a strange and astounding fact; but it is not absurd, it is only unusual.

Assuredly it is possible that I may be mistaken, even grossly mistaken, along with Crookes, De Rochas, Aksakoff. Myers, William James, Schiaparelli, Zöllner, Fechner, and Oliver Lodge. It is possible that all of us have been deceived. It is possible that some day an unexpected experiment may explain our prolonged deception quite simply. So be it! but till it has been explained how we have all been duped by an illusion, I claim that the reality of these materializations must be conceded.

After all, on careful consideration, the absurdity does not seem so portentous as it appears at first sight. When I place my hand before a mirror, its image appears—reflection of light: the thermometer shows a reflection of heat; and a galvanometer, reflection of electricity. It is true that no effect is produced on a balance: but is it so very unreasonable to suppose that the projection of light, heat, and electricity might be associated with a projection of mechanical power? For the problem essentially and definitely works down to that. If the hand can act at a distance on a balance as it does on a thermometer, a mirror, or a galvanometer, it may give the sensation of contact to another person close by. Materialization is a mechanical projection: we already know the projection of light, of heat, and of electricity; it is not a very long step to think that a projection of mechanical energy may be possible. The remarkable demonstrations of Einstein show how close mechanical and luminous energy are to one another.

Many curious facts on the genesis of the materializations are observable, for only very rarely do materializations appear abruptly. They form by a concentration of matter round a central nucleus; much as a planet forms in a nebula, or cells by concentration of protoplasmic material.

It is probable, or rather it is certain, that the genesis differs with different mediums and according to conditions as yet ill-understood. I will endeavour to give an analytical summary, based on the materializations given by Miss Goligher, Marthe Béraud, and especially by Eusapia in whose case I have frequently and for a long time studied the process.

There first appears a more or less formless mass, which may not be even visible, but which can be felt and seems capable of mechanical action. One can hardly help imagining that movements of the table are due to this mechanical energy, this half-invisible hand which presses out the curtain and whose resistance can be felt, while it persists in remaining in shadow. When the table is raised off all four legs, there is always one leg that remains in the shadow. These are the formations that I call ectoplasms, for they seem to emanate from Eusapia's actual body.[1]

This observation, which is a fact and not a hypothesis, has been confirmed at all points by Crawford's excellent work.

Sometimes these ectoplasms can be seen in process of organization; I have seen an almost rectilinear prolongation emerge from Eusapia's body, its termination acting like a living hand. Similarly in the formation of Bien Boa, at first the limbs appeared thin and stiff, like narrow stalks; little by little they thickened, taking the form of more or less solid limbs similar to normal limbs.

I have also, like Geley, Schrenck-Notzing, and Mme. Bisson, been able to see the first lineaments of materializations as they were formed. A kind of liquid or pasty jelly emerges from the mouth or the breast of Marthe which organizes itself by degrees, acquiring the shape of a face or a limb. Under very good conditions of visibility, I have seen this paste spread on my knee, and slowly take form so as to show the rudiment of the radius, the cubitus, or metacarpal bone whose increasing pressure I could feel on my knee.

These materializations are usually gradual, beginning by a rudimentary shape, complete forms and human faces only appearing later on. At first these formations are often very imperfect. Sometimes they show no relief, looking more like flat images than bodies, so that in spite of oneself one is inclined to imagine some fraud, since what appears seems to be the materialization of a semblance, and not of a being. But in some cases the materiali-

[1]Sir Oliver Lodge published in *Light* (April 27, 1921) a very interesting observation formerly made on this fact.

zation is perfect. At the Villa Carmen I saw a fully organized form rise from the floor. At first it was only a white, opaque spot like a handkerchief lying on the ground before the curtain, then this handkerchief quickly assumed the form of a human head level with the floor, and a few moments later it rose up in a straight line and became a small man enveloped in a kind of white burnous, who took two or three halting steps in front of the curtain and then sank to the floor and disappeared as if through a trap-door. But there was no trap-door.[1]

And now to conclude, and having indicated the conditions necessary to a reliable experiment, to decide formally on an answer to the urgent and disturbing question:

Is there such a thing as objective metapsychics?[2]

Strong arguments can be adduced for the reply, "No, there are no objective metapsychics"; no physical phenomena unknown to normal physics are ever produced. The arguments advanced to maintain this opinion may be stated as follows:

[1]I claim here to refute an absurd legend. I was in no way tricked as some little newspapers of Algiers maintained. In the memorandum in which I gave the facts I made some formal reservations, showing some of the more serious objections that I myself made. But no notice was taken either of what I affirmed or of my objections, so that the criticisms that I myself put forward remain. They do not, however, seem decisive to me. As for the objections made by others, they count for nothing.

I conclude, as did my illustrious precursor, Sir William Crookes, I have nothing to withdraw from what I said in 1904; but on the contrary, the excellent experiments subsequently made with the same medium, Marthe, by Mme. Bisson, Schrenck-Notzing, and Geley strikingly confirm our experiences at the Villa Carmen.

As to Eusapia, who has often been suspected of fraud, nothing was ever proved against her. On the contrary, after some doubtful experiments at Cambridge, I asked Myers to come back to see her. He came to my house, and there was then a memorable sitting at which the phenomena were so distinct that I solemnly adjured Myers to declare that there was no trickery, and that the movement of objects at a distance without contact was authentic and undeniable. My lamented friends, Professors Boirac and Flournoy, both of them experienced men of science, were present at that séance and were completely convinced of the reality of movements without contact, i.e., of a materialization, since according to all likelihood, raps and movements of objects are the first stages of materializations in their invisible aspect.

[2]See the remarkable study by Petrovo Solovovo, *Les phénomènes physiques du spiritisme, quelques difficultés, P. S. P. R.*, 1911, 413-447, with a reply by Oliver Lodge, *"A priori arguments against physical phenomena," ibid.*, 447-454. But it is permissible to think that Petrovo Solovovo was strongly influenced by the deception he had resented when, in his experiments with Sambor, it was proved that one of his own personal friends had deceived him; a thing that is both unpleasant and infrequent. In most cases there are no confederates.

1. As Laplace said, the more extraordinary the fact, the more rigorous should be the demonstration. In this case the stricter the conditions the fewer the phenomena become.

2. The more latitude there is for fraud (liberated hands, darkness, absence of scrutiny) the more apparent are the phenomena.

3. All mediums have tricked, perhaps even Home. In any case, if they have not consciously deceived, they have done so unconsciously during their trances. Therefore fraud is always possible.

4. Conjurers, even those of quite moderate ability, can produce much more remarkable illusions than the most powerful mediums. Unless very well versed in legerdemain no one can imagine how completely an ordinary trick conjurer can illusionize.

None of the experiments in direct writing carried out with mediums are of value by reason of the many very easy tricks worked every day, which have grossly deceived even distrustful persons.

5. No observers can maintain continuous attention and observation for two or three hours.

6. All the wonders attributed to the Fox sisters, to Mme. d'Espérance, Florence Cook, Eglinton, Slade, Bailey, Eldred, Miller, and A. Roth must be eliminated, for with them there was evident fraud. There then remain only the experiments with Home, Stainton Moses, and Eusapia. Now these with Eusapia were vehemently contested at Cambridge and in America. The facts recorded of Home were observed by Crookes only; and those alleged of Stainton Moses are derived entirely from himself and from Mr. and Mrs. Speer, who were his intimate friends and much prepossessed in his favour.

In the final analysis, nothing at all remains where everything is so strange and unlikely that multiplied and superabundant proofs are necessary. In proportion as the control increases in severity the phenomena diminish.

Conclusion. In the matter of objective metapsychics, the unlikely phenomena of telekinesis, ectoplasms, and *apports* have so far never been proved. If anything is proved, it is that there are no such things.

Such are the objections that can be alleged against objective metapsychics; and it will be granted that I have not minimized them. These doubts have occurred to me hundreds of times, and I know, better than anyone else, the full force of these arguments. Nevertheless, I do not think them well founded, and I am firmly convinced that there are real physical metapsychic phenomena.

(1) Negative evidence can establish nothing. Certain and positive facts, if substantiated, carry formal proof. When Crookes saw, in full light, a pencil rise and write; when Ochorowicz, also in full light, saw a chair come towards him; when a third hand stroked my face while I held both of Eusapia's hands; no doubt is possible, and the demonstrations are valid *per se*. I quote only these three facts; there are hundreds of others, some of which I shall mention later on.

(2) Mediums are not, unless by some rare exception, skilled in legerdemain. Movements of objects and raps have been verified under unexceptionable conditions so often that even Petrovo Solovovo, despite his scepticism, says (p. 415) "a truly impartial investigator cannot reject them." And if telekinesis and raps are admitted, other physical phenomena are possible.

(3) Even if Home and Eusapia were the only mediums, telekinesis would have to be admitted. Thanks to these two excellent mediums, we have such an assemblage of documents, proofs, and rigorous experiments, conducted by so many different men of science, that no doubt can outweigh them. Myers, Feilding, and Carrington, all sceptical, have accepted them after careful examination. In the whole of physics and physiology, there is no phenomenon that has been more rigidly and repeatedly tested.

There are many other incontestable instances of telekinesis: for instance, if all that Mr. and Mrs. Speer have written concerning Stainton Moses is to be rejected, we must suppose that they were not merely illusionized but were impostors; which is absurd.

(4) There are so many records of collective "hallucinations," collected with such care and attested with such exactitude by persons of unquestionable good faith, that it is not possible to reject them, any more than the non-collective hallucinations. Now from the moment that there is collective perception, there is some degree of objectivity.

(5) The facts of experimental (ectoplasmic) materializations have been observed too often and with too much precision to reject them all.

The question is not properly framed; it is said, "It is for you to prove that a materialization has taken place." I reply, "It is for you to prove in any given case that there was fraud." It is not sufficient to say, "Fraud was possible, therefore there was fraud." The fraud must be proved, and this has hardly ever been done. The *onus probandi* lies on those who discredit a given experiment.

(6) It is absurd, because the physical phenomenon occurring in a direct experiment is not understood, to aver that all physical phenomena are false. Taking the example of the attraction of the magnet for iron, Cicero had already said, "Fiat, necne fiat id quaeritur . . . si rationem cur id fiat afferre nequeam, fieri omnino neges." Must a phenomenon be denied because we do not understand its mechanism? This seems to me contrary to all sound scientific method.

(7) That there are doubtful and even fictitious phenomena is no reason for rejecting all. There might be telekinesis without ectoplasms. There may be ectoplasms without *apports.* There is no need to consider these phenomena indissolubly connected: doubt with regard to one of them does not invalidate others. Proofs of telekinesis that seem to me sufficient and even superabundant, exist. Ectoplasms seem to me to be demonstrated with equal rigor, though these phenomena are more dramatic and extraordinary. On the other hand, *apports,* levitations, and bilocations are doubtful. Slate-writing is almost always produced by skilful legerdemain. Photographs of phantoms and moulded impressions in paraffin still call for more thorough study.

In fine, there are incontestable physical phenomena in metapsychic science.

To deny them at the present time is to ignore phenomena fundamentally new that open up a promising avenue to new discoveries in science; and to remain in the old ruts with which blind official "science" has so long been satisfied.

And a definite conclusion follows. Since the proofs for some phenomena of objective metapsychics (though not for all) are insufficient, experimentation must be started *ab ovo,* from the very beginning.

Following the example of Descartes, we ought to make a clean sweep of all that has been said and written on the subject. The facts of ectoplasms and telekinesis are certain; but their mechanism is profoundly mysterious; therefore let us experiment again and again. We shall certainly reap the reward.

One of the most characteristic phenomena, which, when well observed by a cool-headed experimenter, brings absolute conviction is that the materialized hand *melts* in the hand of the observer (Delanne, chapter on *phantasmal hands that melt,* ii, 695).

Damiani, holding the hands of Eusapia, has felt the fluidic

hands of John melt and dissolve (Delanne, *Apparitions matérialisées,* ii, 163).

"Once," says Crookes, "I held one of Katie's hands in mine, resolved not to let it go. No attempt or effort was made to release it, but little by little the hand seemed to dissolve into vapour, and it thus disengaged itself from my grasp" (Delanne, *ibid.,* 167).

I have unfortunately never been able to verify this decisive phenomenon. With Marthe Béraud and with Eusapia I have several times endeavoured to obtain it, but always in vain; but that is no reason for denying the fact verified by Crookes, Damiani, and others.

Morselli, experimenting with Eusapia, says, "If one grasps the (fluidic) hands one feels the skin, the warmth, the mobile fingers and then the hand seems to dissolve."

Venzano (also with Eusapia) says that the members are in all respects similar to human members, but vanish from the grasp without leaving a trace.

F. Bottazzi, a learned physiologist whose testimony is that of an observer well used to delicate analysis of all experimental conditions, says that a hand (from Eusapia) melted and dissolved in his grasp. A little later, another hand placed on his head vanished from his hold. Again with Eusapia, M. Barzini, the distinguished journalist of the *Corriere della Sera,* says, "The hands did not escape me, they seemed to melt; they failed from between my fingers, and collapsed, like hands that softened and vanished." M. Falcomer, observing a medium named Rostagno, seized a fluidic hand which collapsed. In an experiment that Crookes was making with Florence Cook, Mr. Tapp took hold of Katie's wrist. He says, "Her wrist gave way under my grasp like a piece of thin card or paper, and my fingers met through her arm as if it were fluid."

In a séance described by De Rochas (*A. S. P.,* 1908, xviii, 280) the circle joined hands round the medium, F. M. Montorgueil, taking hold of a hand that was touching his face with some fabric, called for light. The hand melted in his, and all of us, says De Rochas, "thought we saw a luminous trail from his hand to F.'s body." If one could be rigorously certain of M. Montorgueil's observation, that would be first-rate evidence.

These phenomena are very remarkable, not only from the theoretical point of view with respect to ectoplasms, but because they furnish decisive proof of their objectivity. No legerdemain can

produce a living hand that melts in the hand that holds it. I have seen the form of Bien Boa disappear into the floor under my eyes, but a visual sensation is not nearly so certain as a tactile one.

Many other observers have seen dematerializations; the best known and best verified is still that of Katie King.

Mr. Oxley, experimenting with a medium named Mrs. Firmin, claims to have seen the apparition of the materialized "Betty" which seemed to dissolve: first the feet, then gradually the whole body and the head disappeared leaving only a small white spot which soon vanished (Delanne, *loc. cit.*, ii, 268).

In a remarkable series of experiments, Dr. P. Gibier saw the form of Lucie, which had grown under his eyes, subside at his feet like a house of cards, disappearing exactly as Bien Boa disappeared before my own eyes. "Lucie disappeared by degrees in two seconds at most as she had come, but this time some twenty inches in front of the curtains beside which I was standing. The curtains did not move. . . . Just as the last white spot was disappearing from the carpet where the figure had been, I stooped down and put my hand upon it, but could feel nothing."

It is absurd to imagine a hallucination; and the only possible normal explanation would be that the figure was an image reflected by a mirror. But this will not hold, for this phantasm of Lucie breathed and spoke; she even caused the light veil that enveloped her like a cloud to touch Dr. Gibier and Dr. L.

Materialized phantoms therefore disappear just like the subjective visions that so often accompany monitions of death. Are they both constituted of similar substance?—if we may speak of "substance" which vanished without leaving a trace.

But the fundamental (not invariable) difference between accidental and experimental ectoplasms is that in these latter there is real matter, capable of exerting mechanical force, whereas in the former (accompanying monitions of death) it would seem that in the vast majority of cases there is nothing but a "shade" in the popular sense of the word, a reflection, or simulacrum. The experimental ectoplasms are in no sense shadows.

It has been asked how there can be materializations of clothes? This objection is somewhat naïve, for the materialization of a hand is no easier to understand than of the glove that covers it. It is, however, clear that materialization may be of inanimate objects and not of the human body only. The garments are usually veils or draperies, usually white, like muslin, produced by the

gradual transformation of the whitish and more or less luminous cloud with which the apparition begins. The striking experiments of Mme. Bisson and Schrenck-Notzing give us valuable information on these ectoplasmic forms: there seems to be a genesis from an embryo.

It would seem that the materialization of garments discredits somewhat the hypothesis that a deceased human being should materialize. *Prima facie* it was unlikely that a body dissolved by putrefaction or disintegrated by cremation should be reconstructed, though the wild hypothesis of an astral body (!) might be advanced. But what about the astral presentment of a garment, a hat, an eye-glass, or a walking-stick? This is the height of folly. It seems to me much wiser to verify without pretending to understand, and to admit that any explanation we can give can hardly escape being ridiculous.

Instead of claiming that unknown powers pertaining to deceased humanity are capable of producing these phenomena, it is better to admit that we are dealing with facts as yet inexplicable, and await further elucidation.[1] But there is no reason to deny a fact because it is inexplicable. Can anyone have the unpardonable presumption to claim to give an adequate explanation of all natural phenomena? In metapsychics we come up against the inexplicable at every turn. True, but is it not much the same in physics, in chemistry, and in physiology? Why, then, always try to put forward a theory which is foredoomed to futility? We must wait till new facts and fresh observations enable us to adopt some new interpretation, which will doubtless be an unexpected one.

As regards the substance of materializations our ignorance is painful. Some facts (too infrequent to allow of definite conclusions) would seem to imply that this substance can outlast a materialization. Katie gave Crookes a lock of her hair. I kept the hair that Phygia permitted me to cut from her head. Mme. d'Espérance allowed sitters to cut off pieces of the drapery surrounding her.

Equally obscure is the question of *apports*. Either matter can pass through matter, or matter can be created; and both of these two statements are equally extraordinary.

As to the passage of matter through matter the most striking

[1]In the childhood of the race lunar eclipses were ascribed to a dragon devouring the moon. Our notion that materializations are produced by supernatural beings is not much more reasonable.

experiment is that made by P. Gibier, who having shut Mme. Salmon in a cage constructed by himself, saw her come out from it. Sundry alleged facts of the same kind are given in the spiritualist journals and in Mme. Frondoni-Lacombe's book. They are all very doubtful; possible, perhaps, but as yet unproven; the accounts by Stainton Moses notwithstanding.

The same or greater uncertainty pertains to *apports*. Up to the present there is not a single case whose genuineness has been established. On the contrary, as soon as close analysis is brought to bear, fraud is disclosed, as in the cases of Bailey and Anna Roth.

I do not deny *apports*. It would be rash to deny anything in metapsychics: I only say they are unproven.

The materialization of hands is absolutely certain, and likewise that of faces and whole bodies, though hands alone have been seen much more often; but no satisfactory proof of *apports* or of the passage of matter through matter has been brought forward and it is wise to reserve judgment.

What does seem to be proved (and it is a relief to find a positive fact in the midst of so much uncertainty), is that the ectoplasms in most cases emerge from the body of the medium; hence the word "*ecto*-plasm." The experiments of Mme. Bisson and Dr. Schrenck-Notzing establish this important fact. Gelatinous projections come from the mouth or the shoulders of Marthe. I saw the arm of Bien Boa formed in this way. At first it resembled a thin, rigid rod covered with drapery. Little by little this rod thickened under the drapery and became a stretched-out arm. The same phenomenon was very clearly observable with Eusapia. A kind of supplementary arm seemed to come from her body. Once I saw a long, stiff rod proceed from her side, which after great extension had a hand at its extremity—a living hand warm and jointed, absolutely like a human hand.

The ectoplasmic formations with other mediums were doubtless of the same nature.

Russel Wallace, experimenting with Dr. Monck, saw a light, whitish vapour appear on the left side of Monck's coat. Its density increased. White flakes, like snowflakes, moved in the air extending from the floor to the height of his shoulder. Then this cloud separated from the medium sufficiently to take on the semblance of a woman in flowing white draperies. Then all returned into the body of the medium (Delanne, *loc. cit.*, 644).

Mr. Mitchiner observed a white vapour emerge from Eglinton's side, wreathe itself round his feet, then gradually form a column which took on the aspect of a tall, fine-looking man with a black beard. Eglinton was perfectly visible during the whole time, and a kind of umbilical cord connected him with the nebulous form. After a short time, Eglinton being seated, the form seemed to dissolve into his body at the level of the chest. A. de Rochas, experimenting with Mme. d'Espérance, saw a luminous vapour, like the Milky Way, emerge from her breast.

It is not necessary that the sequence of materializations should always be the same; there may be differences of power in various mediums. With the exceptionally powerful, such as Home and Florence Cook, the materialization is rapid and complete, and the ectoplasm is separate from the first; with others, also very powerful, like Eglinton, Mme. d'Espérance, and Marthe Béraud, separation from the ectoplasm does not take place at once and the reality of the phantom is very transitory. With Eusapia and Stainton Moses the forms are much less defined; only very rarely can an independent apparition, autonomous and separate from the medium, be seen.

Provisionally, the sequence of materialization phenomena, as observed with Eusapia, may be stated as follows: At first, touches and raps produced both easily and frequently; this is the first stage, in which nothing is visible, for the material energy disengaged from her body is formless. In the second stage the hand is formed, but still cannot be seen, though it can execute well-defined mechanical actions, can take hold of a bell or a book, and can touch one's head with fingers that are felt to be warm and jointed. Finally in the third stage, which was rarely reached in my experiments with Eusapia, the hand becomes visible and can be photographed.

In a still rarer, fourth stage, not only a hand but a whole body is formed and detached. Vassallo, Porro, Morselli, and Bottazzi have been able to witness these complete materializations.

Luminous phenomena are relatively frequent. I know that these lend themselves to simulation, at least when they take the form of wandering lights which move like sparks before the sitters and disappear. I know that these can be imitated with little phosphorescent projections, but no one has perceived any odour of phosphorus after these lights, and the trick is not easy when both hands of the medium are held as Eusapia's were, and she con-

tinues to talk. This excludes the hypothesis of little particles of phosphorus held in her mouth, which has actually been advanced (??).

Such a use of phosphorus is, as a matter of fact, impossible when the medium has been searched, undressed, her hands held, and when, as with Eusapia at Ribaud Island, there was no phosphorus at her disposal. On some occasions (though not very often) Ochorowicz and I have seen small green lights, like eyes, oblique in shape, floating about in the air. In Paris, in Milan, in Rome, and Montfort-l'Amaury, other observers have verified the same. I have myself recently seen it at Warsaw with several mediums under unexceptionable conditions.

Nearly all noted mediums—Eglinton, Mme. d'Espérance, and Florence Cook—have produced luminous phenomena.

Mr. Livermore, experimenting with Kate Fox (a medium open to suspicion), thus describes the phenomenon:[1]

"A spherical ovoid of light rises from the floor as high as our foreheads and places itself on the table in front of us. At my request the light immediately became so bright as to light up that part of the room. We saw perfectly the form of a woman holding the light in her outstretched hand." Livermore does not say if Kate Fox was herself also seen at this moment.

With Home, luminous phenomena were very frequently observed.[2] Sometimes it was a small luminous ball floating in the air; sometimes small phosphorescent lights, occasionally much brighter effects—"a bright beam of sunshine flooding us with light, and a beautiful rainbow appeared in the heavens," sometimes wandering lights touched the sitters and gave the impression of

[1]At this point there occurred a singular instance of cryptesthesia. I had broken off my writing at the word "phenomenon" above, on Monday, February 9th, at 4.30 P.M. Leaving the paper on my desk, I went out to make an experiment with Stella, who had never been into my house. She knew in a general way that I was engaged on a treatise on metapsychics, but had, of course, never seen a line of it. That day I interrogated her with the planchette on a lost will (result absolutely nil), and instead of an answer on this subject I received "Helios I make by radiation," a phrase which applies curiously to the last sentence I was writing at my own house.

This may be a coincidence, though I do not think so, but even so it is worth noting. My hands were not on the table and the word "Helios" surprised me greatly. Stella knows no Greek, but knows the meaning of "Helios." The phrase given by the planchette seems to be the logical sequel to the interrupted sentence in my MS.

[2]*Experiments on spiritualism by Viscount Adare,* s. l. n. d. (London, 1869), pp. 13, 38, 52, 60, 65, 76, 83, 88, 89, 114, 124.

contact with a foreign body. In one remarkable case Lindsay and Charlie saw, as it were, tongues of fire on Home's head.

With Stainton Moses the lights were frequent, sometimes very bright,[1] appearing like reflected lights (from what source?) columns of phosphorescent vapour or diffused light like that of a comet, or like stars; in short, most varied forms. These lights were observed sometimes by S. Moses himself, sometimes by Mr. and Mrs. Speer. The good faith of these observers is not to be impugned; though we may suppose that Stainton Moses, when alone, may have been liable to visual hallucinations.

Hyslop (*Am. J. S. P. R.*, 1912, 190) has reported that Anna Burton produced lights when in a state of trance. Such lights could not have appeared four feet away from her even if she had had lucifer matches of phosphorized oil, for she had been carefully undressed and clothed in special garments before the experiment. It was, however, noticed that in one case her saliva was phosphorescent, which detracts somewhat from the authenticity of the phenomenon, though in view of the very poisonous nature of phosphorus, it is difficult to imagine that she could keep phosphorous matches in her mouth. Besides, even if this were admitted, it is not easy to see how lights of the kind described could appear.

E. Bozzano (*A. S. P.*, 1909, xix, 82) has observed thin whitish fluidic filaments proceeding from each of the joints of Eusapia's fingers.

J. Ochorowicz has insisted on the luminous flashes that proceeded from Stanislawa Tomczyk, with whom he made some very good experiments. He reminds us that MacNab had obtained them also. Wandering lights are often seen with Eusapia, small green lights which I have seen sometimes, but rarely. It is improbable that these lights are akin to the luminous aureole more or less like that of the saints, which emanates from the body of some mediums. Commandant Darget has studied these lights and tried to photograph them, but, as G. de Fontenay has shown, it is likely that there are photographic errors. The same holds good for H. Baraduc's negatives.

Photographic studies of luminous emanations from mediums, resembling clouds, flashes, or bright vapour, are still too uncertain

[1]Consult especially *The experiences of W. Stainton Moses, P. S. P. R.*, xi, 1895, 24-114.

to allow of any definite conclusions. It seems, however, especially since Ochorowicz's able work, that a series of valuable researches might be undertaken on this; but there are two necessary conditions, both difficult to secure—a powerful medium (for it is averred that only mediums have this power) and an experimenter who is at once a good psychologist and a skilled photographer.[1]

In certain cases, loud and extraordinary sounds, which are assuredly objective, are heard. Near Stainton Moses very loud sounds are described by Dr. and Mrs. Speer. The sounds that Grocyn (the so-called guide of Stainton Moses) drew from his invisible instrument were so powerful as to resemble those that a giant might draw from a huge violoncello . . . they were sometimes such as to produce terror . . . they were like a double bass played on a big drum and plucked like a guitar. Dr. Speer says, "Up to then we had not heard the sound of wind-instruments, when there resounded a loud trumpet-call between Stainton and myself. This sound was repeated several times. . . . One evening we heard the sound of bells in the garden following us about . . . in the room, where there were no

[1]To show the extreme difficulty of good photographic experiments, it is sufficient to recall the fruitless and laborious endeavours of G. Le Bon, an experienced photographer, with what he calls "dark light." So also the N-rays, which have not been demonstrated, though studied and described by eminent physicists. In such matters *experientia fallax, judicium difficile* I shall therefore not consider the photographs received by A. de Rochas from one of his relations, a very sincere person, M. de B. (*A. S. P.*, 1905, xv, 582). Is it certain that M. de B.'s brother-in-law has not imagined a spirit-photograph? which is so easy to make. Regarding faked photographs, consult A. de Rochas (*A. S. P.*, 1908, viii, 9-15); Darget (*A. S. P.*, 1909, xix, 20-26); Julia Rosenkrantz (*A. S. P.*, 1909, xix, 361-365). E. Morselli has published an erudite and witty article on this subject, with some amusing photographs (*A. S. P.*, 1908, xviii, 159).

The genuineness of so-called psychic photographs is still a matter of dispute, for there have been lamentable trickeries. Mr. Allerton S. Cushman obtained "An Evidential Case of Spirit Photography" (published under that title in the *J. S. P. R.*, April, 1922, pp. 132-147). Mr. and Mrs. Cushman of Washington came to England quite unexpectedly without making their intention known to anyone. They went to the British College of Psychic Science at 59 Holland Park, London, and not finding Mr. Hope of Crewe, they had an interview with Mrs. Deane, another psychic photographer. On one of the negatives taken there appears a face very like that of a young daughter of Mr. and Mrs. Cushman who had died eighteen months before. "It cannot be supposed that this portrait is a reproduction of any existing portrait for none such was taken to the College, and the attitudes are different, especially the direction of the eyes. The whole question is the degree of resemblance between the psychic image and the dead girl. It must be admitted that the resemblance to the normal portrait is so close as to be almost identical" (Second edition).

musical instruments, the carillon continued, giving the effect of a brilliant concerto on the piano." [1]

Stainton Moses showed many other objective phenomena which must be considered genuine unless we admit the absurd hypothesis of wilful deceit on the part of three honourable persons who risked persecution, ridicule, and hostility by publishing them and could get nothing by doing so but abuse and calumnies.

Sometimes perfumes exuded from his head, and the more they were wiped away the more abundant they became.

Direct writing was obtained. Dr. Speer, being alone in the room, took a sheet of music paper, placed it on a bureau with a pencil, and left the room, locking the door after him. He never lost sight of the door, and no one could enter the room; but on his return the paper was covered with writing. "This instance of direct writing," he says, "is one of the most satisfying proofs we have ever received."

There were also lights, weak at first, but gradually becoming very bright, like torches. Mrs. Speer says that one of these luminous nuclei came on to the table, skimmed round the heads of the sitters, struck against the ceiling, and went to the top of the door, giving out a sound whenever it touched anything. Sometimes a hand could be seen holding the light, a hand quite different from that of Stainton Moses. One day one of these lights rose from the floor through the table as if it were no obstacle. Once such a light remained visible for half an hour.

Mr. Podmore, convinced that there are no objective phenomena and that there cannot be any, has tried, without adducing the semblance of proof, to maintain that Stainton Moses was a great neuropath, a hysteric, deceiving for the sake of deceiving, moved by a kind of half-morbid, half-unconscious knavery. These insinuations against the good faith and honesty of Stainton Moses will not hold. F. Myers had a great admiration for him. Dr. Johnson, his medical attendant, states that he was a man of great intellectual capacity, methodical, well balanced, and a steady worker. It would be necessary also to incriminate Dr. and Mrs. Speer and other honourable witnesses.

In fine, it is not to be imagined that these luminous phenomena are explicable as hallucination or as fraud. Hallucination is one of those ridiculous hypotheses which are as inadmissible in meta-

[1] Bozzano, *Pour la défense de Stainton Moses, A. S. P.*, 1905, xv, 76-129.

psychics as in any other science. An observer is never hallucinated. When he reads 38.55 on a thermometer it is because that is the temperature indicated. If he sees a light or hears a sound, or perceives an odour, it is because there is an objective fact that produces these sensations.

Fraud, of course, is always possible; but phosphorescent balls which give no odour of phosphorus, luminous appearances round the head, or luminous hands are phenomena that no medium can produce by trickery after he has been carefully searched.

Neverthless, luminosity is so strange a fact that further proofs must be required; methodical research is necessary. We must wait till we have mediums capable of producing luminous phenomena, like Home, Eusapia, Stainton Moses, and Eglinton, and then endeavour to scrutinize the conditions yet more closely than our illustrious predecessors did.

The production of sounds and scents belongs to the same group of physical phenomena as ectoplasms. Again it is from Home and Moses that most of the data are drawn, and again new experiments to verify and intensify the effects produced by these celebrated and powerful mediums are desirable.

It would have been valuable that these luminosities should have been established by photography, but up to the present, apart from the experiments by Crookes, Mme. Bisson, Schrenck-Notzing, Imoda, and Ochorowicz, the results in this direction are but poor.

The painful imperfection of the old spiritist photographs may be seen from the book published by Dr. Foveau de Courmelles at the instigation of M. Emmanuel Vauchez.[1] Despite all my goodwill I cannot consider most of these faces as authentic.

Only very simple-minded persons could accept the photographs by Dr. Th. Haumann of Washington. Almost all the photographs which show doubles result either from photographic errors or from a very easy trick. Double exposure, easily done by the least skilful, gives a very good imitation of a phantom or a materialized face.

Photographs of a form that is visible to the experimenters is totally different from these. Unless there is gross trickery (as in the case of Ofélia Corralès at Costa Rica), photography has the great merit that it defines the phenomenon and registers details that a rapid glance may have passed over. However, in certain

[1] *La Photographie transcendentale,* 1 vol., 8vo, Paris, *Libr. nationale.*

cases, methodical, prolonged, and conscientious observation is nearly as valid as photography. The shock of the flashlight often arrests the phenomena and then the successive stages of their production cannot be followed, as I was able to do with Marthe Béraud.

But as to doubles, effluvia, portraits of the deceased, of phantoms invisible to the sitters and perceptible only on the photographic plate, I do not think that anything decisive has yet been produced. What the eye does not see the plate rarely registers. The whole question of human effluvia, thought forms (as Commandant Darget has endeavoured to demonstrate them) must be studied anew from the very beginning. Whatever Sir A. Conan Doyle may claim, it must be stated that, despite many attempts, nothing reliable has been proved.[1]

Photographic evidence of this kind is always to be received with caution, unless the exact conditions under which the negative was taken are known. Mr. Arthur Hill, in the *Occult Review* of March, 1910, gives a remarkable case, though he raises some doubts and with some reason. A photographer at S——in Lincolnshire, named Binns, not a spiritualist and making no pretensions to anything of the kind, when developing the photograph of a client—a farmer named Warren—saw the superimposed face of a certain Mr. Ground, a cousin of Warren's, of whose existence Binns did not know. This man Ground was dying in a hospital about fifteen miles away. The plate was taken from a fresh packet. Mr. Ground had never been photographed since his childhood. Everything seems to point to an authentic fact. But we can scarcely draw this conclusion without further proof.

After a detailed study which is a model of methodical argument, Mr. Walter F. Prince concludes that the number of so-called spirit photographs representing Mr. Bocock are due to fraud: and he adds, very justly, that there is not as yet any completely satisfactory proof of "spirit photography" (*Am. S. P. R.*, March, 1920, 585).

It is difficult to contest that pronouncement, but it applies only to the cases when the head or the form is invisible to the sitters; in these latter cases criticism should be directed to the control of the medium and not to the photographic process.

[1]To judge of the extreme difficulty of transcendental photography, the book by G. de Fontenay, *La Photographie et l'étude des phénomènes psychiques*, Paris (Gauthier Villars, 1912), may profitably be read.

After treating of ectoplasms, some other peculiar facts should be mentioned that find no place among ordinary ectoplasmic phenomena. These are mostly due to Home.

The most astounding experiments with Home, prior to those by Crookes, are described in a very rare book[1] of which only fifty copies were printed. I owe my knowledge of it to J. Maxwell.

It deals with private experiments made by Viscount Adare in 1867 and 1868, when Home was at his house. Viscount Adare did not intend these reports, which were letters addressed to his father, for general circulation. In his introduction he says, "I have omitted mention of the precautions taken against trickery, collusion, and other fraudulent acts; for I have been convinced that precautions were needless, having invariably found that the phenomena were such as could only be produced by an intelligence invisible indeed but active and acting from reason."

The absence of such indications of the precautions taken against conscious or unconscious fraud by Home causes some misgivings, but as all the details have been very carefully noted by Viscount Adare these wonderful séances can be reconstructed and we can suppose that deceptions difficult, and by the nature of the phenomena, almost impossible, were not practised. We may admit that Viscount Adare, Lord Dunraven, Mr. Jencken, Major Blackburn, and the other honourable and educated sitters would have needed to be terribly blinded by credulity to have failed in unmasking gross and palpable frauds continued for two years. And it must be remembered that when Crookes took many and rigorous precautions nearly the same phenomena were produced.

To adhere strictly to the plan of the present book as a treatise on metapsychics, the telekinesis, raps, levitations, and other singular phenomena reported by Viscount Adare should be treated in separate chapters; but it is perhaps better, at the risk of departing from the logical order, to summarize in one place the extraordinary facts that he narrates.

Movements without contact were frequent; an accordion, of which Home only held one side, played a melody singularly well. This was in the light. Raps were heard over the whole room at the same time (pp. 2-4).

In a room completely darkened (p. 13) Home sat at the piano,

[1] *Experiences in spiritualism with Mr. D. D. Home, by Viscount Adare, with introductory remarks by the Earl of Dunraven.* London, Thomas Scott, 1869 (?).

and this piano rose from the ground, first about an inch, and then about fifteen inches. That day Home's body was *elongated* (??). Viscount Adare says that no error was possible. His ordinary height is five feet eight inches; he elongated to six feet five and one-half inches.

The table rose into the air seventeen times, as stated in the index to the chief phenomena at the beginning of the book (xxiv-xxv). Once it rose seventeen inches and remained at that height for a considerable time (p. 109). In the experiment of March 12, 1869, a table with four legs placed twenty-one inches from Home's chair rose in the air while no one was touching it and settled gently on another table on which were a number of objects, without touching any of them. During all that time strange noises were heard, like voices, and the table was shaken by strong vibrations. On the 29th of March, in the light, the table rose to a height of twenty-three inches, swaying in the air, and after remaining at that height for a few seconds rose farther to at least five feet and then came down with a noise like a railway train.

Levitations were frequent, and still more frequent the elongations, this latter a singular phenomenon very susceptible of mistake, for which we have no parallel. Home was placed against the wall, Adare being in front of him; then his arms seemed to lengthen and his breast to swell. "Home said to me, 'Adare, you see the extension is from the chest.' He again placed himself against the wall and extended his arms to their ordinary stretch. I made a pencil mark on the wall at the ends of his fingers. He then lengthened his left arm and I made a fresh mark; then his right arm, which I also marked. The total elongation, measured in this way, was nine and one-half inches."

This experiment is much less conclusive than would appear at first sight; for the voluntary power of extension of the arms is variable so that this elongation is far from being an authentic fact, and it is better not to make much of it.

Apparitions of hands, touches, and lights round the head were frequent.

I will give only a few details of a levitation and a fire test, from Adare's book, slightly abridged.

On the 16th of December, at Buckingham Gate (p. 82) in presence of Viscount Adare, Captain Charlie Wynne, and the Master of Lindsay, Home elongated and rose into the air. Then he said, "Do not be frightened, and on no account leave your

chairs." Then Lindsay said, "It is too horrible. He has passed through the window to the next room, and is coming in at that window." Then, says Viscount Adare, we heard Home in the next room; he came back through the window, sat down, and began to laugh. "I laugh," said he, "to think that if a policeman had seen me how surprised he would have been to see a man come through the window and float along the wall. Adare, come with me." We went into the adjoining room. I opened the window which he went through headfirst, his body being nearly horizontal and apparently rigid. Then he returned and we went into the next room. The rooms were on the third floor.

Other strange things were seen—a form like a bird flying and whistling in the room, tongues and jets of fire from Home's head; then as it were the blast of a strong wind, "the most weird thing I ever heard."

The fire test is more astonishing still. At Norwood in the house of Mrs. Hennings (p. 68), Home first gave Adare the power to raise a book by placing his hand flat above it: at one moment there was an interval of more than two inches between the hand and the book. Then he went to the fireplace, took out a burning coal twice as large as an orange, put it on his hand and walked about the room showing it. He then gave us his hands to smell, which instead of having any odour of burning were scented; he replaced the coal in the fire, and kneeling down "placed his face right among the burning coals, moving it about as though bathing it in water!!" Then he held his hands some time over the flame of a candle. He took the lighted coal again into his hands and blew on it to quicken it. "He asked me to touch it; I did so and took it into my two hands, he put his hands over it, and we held the lighted coal in our four hands; I hardly felt any heat."

The same astounding experiment was repeated on April 3d at Astley House (p. 147). This séance was remarkable; it is corroborated by Mr. S. C. Hall. A lighted coal was placed on Mr. Hall's head, and his white hair was combed over the coal, and left four or five minutes (p. 178): the hair was not burned: a few moments later this coal was so hot that one could not bear one's face near it.

We must hold in suspense belief in these unheard-of facts till new proofs have been given; but there have been so many rash denials already in metapsychic matters that we ought to be cautious in our negations. These experiences are not comparable to

the celebrated ordeal by fire that certain fakirs[1] provide for the delectation of the public, for to them all verification is wanting, and the precise conditions are not revealed. Possibly abundant perspiration after quick walking might suffice to prevent burning (??).

In any case, if the narrative of Lord Adare, corroborated by Mrs. Hennings, Mr. and Mrs. Jencken, Mr. Saal and Mr. Hart, is correct, no natural explanation seems possible

It is beyond doubt powerful mediums produce peculiar and nearly unique phenomena which can hardly be classified. For instance: In a séance at Paris in the house of C. Flammarion, I was holding Eusapia's right hand, and Flammarion her left. I repeatedly felt with my right hand John's large hand through the curtain. I said to Eusapia, "I am going to prick that hand to see whether it is really a living hand." The room was in half-light, and a pin was given me. Taking the pin in my right hand I pricked John's hand through the curtain. I then felt a prick on my left shoulder through my clothes, as if a pin were thrust in, without hurting me much, but enough to stop me, and I ceased to prick the hypothetical fluidic hand. The prick I felt on my shoulder was no hypothesis. Obviously no explanation can be attempted.

Another strange phenomenon, unique up to the present, is the case of the letter announcing a serious event, which when placed on the mantelpiece gave raps loud enough to call attention (p. 447).

The verification of such unique and isolated phenomena must depend on a knowledge in minute detail of the lives of powerful mediums. All hagiographies are certainly not illusions or impostures; but it is impossible to distinguish what is true from what is false. It would be folly to accept all that is said in the lives of the saints; but it would be equally rash to deny everything. As there really are rare and well-nigh unique phenomena of which verification is always more or less defective, it is well to wait before forming a decided opinion. There are more surprises in reserve in metapsychics than in any other science.

Meanwhile we must base our conclusions, not on exceptional phenomena, but on the ectoplasmic facts that are, so to say, commonplaces of metapsychics.

[1]Or the Aissaouas. See J. Davane, *Les Aissaouas charmeurs de serpent*, Paris, Dentu, 1862, 2d éd., et Davyl, Paris, 1882.

Telekinesis and ectoplasms are degrees of the same thing—the objectification or projection of an intelligent mechanical energy. This mechanical energy is sometimes invisible, as when an accordion moves without apparently being touched: sometimes visible when the energy takes the form of a living moving hand. But both are exteriorizations of motive power—*extériorisations de la motricité*—to borrow the excellent term devised by De Rochas.

The fact that intelligent forces are projected from an organism, that can act mechanically, can move objects and make sounds, is a phenomenon as certainly established as any fact in physics. The only difference between this telekinesis (revealed by movements and raps) and ordinary commonplace mechanical effects is that the former is exceptional, only producible by a very small number of persons, and even by them only occasionally and with difficulty.

All the same it is an assured fact—the experiments with Home, Eusapia, Stainton Moses, and Miss Goligher prove it definitely. It is doubtless grievous to a scientific man to have to admit that there are exceptional phenomena; yet the magnet attracts iron! That is exceptional, but no one denies it.

The materialization of a hand, of a body having all the semblance of life, of a face, or of a phantom, is a fact as assured as telekinesis; and this makes it all the more difficult to understand, for these forms seem to have all the attributes of life. Materialized forms are intelligent, and have, at any rate in appearance, a personality: the hand is warm and living, the eyes move in their orbits and look, the voice speaks, the respiration disengages carbon dioxide, the legs move, and the hands take hold of objects.

The genesis of seemingly living forms has been observed; they begin like a nebula, they consolidate in the same way as a nebula condenses into a planet. Garments, veils, and accessories are formed simultaneously, and all have usually but a transitory existence, vanishing as they came—*ceu fumus in auras.*

To affirm all this is to affirm a great deal. Is it possible to go farther? It may be possible in the future, but today it would be imprudent to go beyond. Let us pause before the Beyond!

Photographs, direct writing, *apports,* the production of musical sounds and of lights cannot be held to be established, fraud being easy and frequent. Metapsychics presents so many strange facts, that these also may be possible, and even for the most part admissible. No one would have thought of simulating them if they

had never really occurred. I do not hesitate to think them fairly probable, but they are not proven. We must stop short, being in the domain of strict science, and on the threshold of a mystery, and we can affirm telekinesis and materializations, but nothing more.

In speaking of lucidity it was said that experiences of lucidity were of themselves insufficient to prove survival scientifically; for cognition of things inaccessible to our senses is a simpler hypothesis than the survival of a dead person. We will now consider whether materializations give the proof of survival that lucidity alone cannot give.

In the first place the affirmation of a phantom that he is such and such a person counts for little or nothing. When the phantom of Bien Boa appears and claims to be an Indian prince, although the objective reality of the apparition is certain in the given conditions, there is nothing to prove that this phantom is animated by the mind of a deceased Indian prince who remembers all his past. Helen Smith says she is Marie Antoinette, but that does not convince me that Marie Antoinette has returned to earth and speaks by Helen's vocal organs: the affirmations of Bien Boa and John King have no more value. Up to the present the ideas, gestures, and words of materialized forms do not entitle us to say that their personality differs from that of the medium more than the personalities evoked by Alice, when hypnotized, differ from Alice in her normal state. It is therefore very rash to assume that the consciousness of Bien Boa, Marie Antoinette, or John King returns to us.

Unfortunately for the spiritualist doctrine no proof can be given, or at any rate it has not yet been given. The case of George Pelham, though there was no materialization, is vastly more evidential for survival than all the materializations yet known. I do not even see how decisive proof could be given. Even if (which is not the case) a form identical with that of a deceased person could be photographed, I should not understand how an individual two hundred years dead, whose body has become a skeleton, could live again with this vanished body any more than with any other material form.

Materializations, however perfect, cannot prove survival; the evidence that they sometimes seem to give is much less striking than that given by subjective metapsychics.

We must not be appalled at the idea of the materialization of complete form. The problem is the same in the case of a hand or of a whole body; it is as difficult to understand the materialization of a living hand, warm, articulated, and mobile, or even of a single finger, as to understand the materialization of an entire personality which comes and goes, speaks, and moves the veil that covers him. The improbability is the same.

Have these forms a personal psychological existence? If we had only experimental materializations on which to answer this question, we should be inclined to reply in the negative; for the personalities that appear in the course of experiment do not seem more conscious of themselves than those which manifest by automatic writing. They seem to pertain more or less to the conscious or unconscious fancy of the medium.

But experimental materializations cannot be separated from accidental materializations. There are "haunted houses" in which a form appears that seems independent of the will or imagination of persons there present. There are monitions that are not entirely subjective, since they are perceived collectively, so that if the existence of beings independently of human beings cannot be proved, neither can it be disproved.

It is extremely disappointing to find that our reasoning always ends in uncertainty. But at least the uncertainty extends only to the explanation and not to the facts of telekinesis and materialization.

In any case we can, thanks to the experiments of Crawford, Ochorowicz, Mme. Bisson, and Schrenck-Notzing, form some idea on the genesis of these phenomena, and sketch out a kind of embryology. This embryogenesis may not be identical in all cases, but in some that have been very exactly observed and illustrated by photography, a kind of nebulous, gelatinous substance exudes from the medium's body and gradually is organized into a living, moving form. The ectoplasmic cloud would seem to become living substance while at the same time veils develop around it that conceal the mechanism of its condensation into living tissues.

M. P. Lecour has compared the process to the condensation of a nebula (*A. S. P.*, June, 1913, 162). There is at first a condensation of cosmic matter into a more or less compact mass, in spirals, sometimes in rings; it then condenses further into suns, or, in the larger nebulæ and under central forces, into planets. Ectoplasmic formations are very similar to this; and M. Lecour re-

produces photographs by Ochorowicz and Aksakoff. Similar clouds appeared at the Villa Carmen, and condensed; and likewise with Linda, Eusapia, Mme. d'Espérance, and at experiments by Florence Marryat, Dr. Gibier, and Stainton Moses. The identity of process in the condensation of whitish clouds and luminous vapours is striking. Venzano describes a mass of vapour at the side of Eusapia, in rapid swirling movement. One of the observers at Algiers saw white flakes of vapour of differing brightness that gradually condensed. Imoda describes a white cloud floating round Linda. Courtier at the Psychological Institute saw phosphorescent lights moving in the cabinet round Eusapia, which came to the opening between the curtains and seemed to rise vertically as they condensed. M. Lecour observed round an unnamed medium, luminous masses which gradually assumed ill-defined corporeal forms, appearing and disappearing.

Further scientific knowledge will take us farther, and doubtless metapsychic science has great surprises in store.

(b) *Leading Ectoplasmic Experiments*

Under this head we shall consider various cases of materialization.[1]

Experimenting with Home, Crookes saw materializations. Mere touches were frequent, but visible materializations were rarer. His experiments are most decisive and it seems impossible to doubt them. In a fair number of cases hands were seen in full light. Home wished that all phenomena should take place in the light. "His powers were sufficient," says Crookes, "to overcome this adverse influence. With two exceptions, everything that I witnessed with him took place in the light.

"A little hand, very beautifully formed, rose from the table in the dining-room and gave me a flower. It appeared and disappeared three times, giving me every opportunity to convince myself that it was as real as my own; this took place in the light, in my own room, while I was holding the medium's hands and feet.

"Many times I and other persons have seen a hand pressing the

[1]When an experiment is described with too few details to allow anyone who did not see it to form a decided opinion, I am careful to say so; and *a fortiori,* when an experiment seems to me defective I do not hesitate to indicate this. If, on the contrary, the experiment seems to me evidential, I make this clear; but I shall usually cite the facts with their bibliographical references and leave the reader to judge of them.

keys of an accordion while we could see the hands of the medium, or when they were held.

"A finger and a form were seen plucking the petals from a flower in Mr. Home's button-hole.

"The hands and fingers did not always seem solid and as though alive. Sometimes they rather resembled a condensed vapour; a luminous cloud seemed to form round an object; it then condensed and took the form of a beautifully shaped hand, the flesh of which seemed as human as that of any person present. At the wrist or the arms it became vaporous and ended in a luminous cloud.[1]

"I have held one of these hands in mine, resolved not to let it go; no effort or attempt was made to make me release it; but the hand seemed to dissolve into vapour and so disengaged itself from my grasp.[2]

"Another time in my own house I saw the window curtains some eight feet distant from Home shaking, and a semi-transparent dark shape resembling a human form was seen by all the sitters standing up by the casement holding the curtain in its hand. While we were looking at it, it vanished and the curtains ceased to move.

"On another occasion a phantom form advanced from one corner of the room, and, taking an accordion, moved forward into the room playing the instrument. This form was visible for several minutes by all present. We could see Mr. Home also. The phantom approached a lady who was sitting near; she gave a little cry and the shade vanished."

In a memorable letter (March, 1874) Crookes says: "I have at last obtained the absolute proof I have been seeking. On March 2d during a séance at my house, Katie (the apparition), having moved among us, retired behind the curtain and a moment later called me, saying, *Come into the cabinet and raise my medium's head.* Katie stood before me in her usual white robe and wearing her turban. I went towards the bookcase to raise Miss Cook, and Katie moved aside to let me pass. Miss Cook had slipped

[1]This is exactly what I observed in the materializations at the Villa Carmen —a luminous cloud whose outlines became more defined and took on human substance and form. In certain photographs taken by Aksakoff (perhaps the only ones which have some value among the old spiritist photographs), a luminous cloud is seen which finally organizes itself and develops into a nude human shape.

[2]This truly crucial experiment did not succeed with me. Contrary to what Crookes found with Home, the fluidic hands from Eusapia and Marthe made great efforts to release themselves.

down, and I had the satisfaction of seeing that she was not dressed like Katie but was wearing her usual dress of black velvet . . . Not more than three seconds had elapsed between the time when I saw Katie before me till I raised Miss Cook again on the sofa. . . . The gas was then turned out, and Katie asked for the phosphorus lamp; and after having shown herself by its light for several seconds, she put it back in my hands, saying, *Now come in and see my medium.* I went in and saw Miss Cook on the sofa.



FIG. 18.—PHOTOGRAPH OF WILLIAM CROOKES AND KATIE KING
(Taken probably in 1872.)

Another day Katie said that she would show herself at the same time as Miss Cook. . . . I saw Miss Cook, dressed in black velvet, apparently asleep; she did not move when I took her hand. Raising the lamp I looked round and saw Katie standing close behind Miss Cook. She was clothed in flowing white draperies. Holding one of Miss Cook's hands and kneeling down by her I raised and lowered the lamp so as to see Katie's whole figure and to convince myself that it was really Katie. She did not speak

but moved her head. Three times I examined Miss Cook carefully to be sure that the hand I was holding was really the hand of a living woman, and three times I turned the light on Katie and regarded her attentively. At last Katie signed to me to leave. I went to another part of the cabinet and ceased to see her, but did not leave the room till Miss Cook had waked up and two of the sitters had brought in a light.

"Katie is six inches taller than Miss Cook; yesterday, with bare feet, she was four and one-half inches taller. Her neck was bare and did not show the cicatrice that is on Miss Cook's neck. Her ears are not pierced, her complexion is very fair, and her fingers much longer than those of Miss Cook."

Later, Crookes says (p. 193): "I have often raised one side of the curtain and then the seven or eight persons in the laboratory could see both Katie and Miss Cook in the full light of the electric lamps. We could not see the medium's face because of the shawl covering it, but we could see her feet and her hands: we could see her moving as if in pain and could hear her moans."

Katie King had long before announced that she would be able to remain with her medium only for a short time, and that she must soon bid her farewell. The last séance was on May 21, 1874. There was then a dramatic scene at which Sir William Crookes was present. Katie gave her last instructions, and went to Miss Cook who was lying insensible on the floor. Katie touched her and said, *Wake up, Florence, I must now leave you.* Miss Cook awoke and with tears besought Katie to remain with her, but in vain; Katie of the white robe disappeared. Crookes held up the fainting medium and Katie was seen no more.

Other interesting experiments were made with Miss Cook by various persons. Florence Marryat (quoted by Erny, p. 145) says: "Katie King stood by the wall of the room, with both arms extended as if crucified. Three gas-jets threw a bright light upon her. The effect was stupefying. She remained so for about one second, then began to disintegrate; her features became nebulous, the eyes retreated into their orbits, the nose disappeared, and then the brows, then the limbs seemed to drop apart to the floor; at last only part of the head and some white garments remained, then all vanished."

In a séance at Mr. Luxmore's house, a Mr. Volkmann seized Katie by the waist, crying, "It is the medium." Henry Dunphy remarked that Katie lost her arms and legs; she escaped from Mr.

Volkmann, slipping from his grasp and leaving no trace. Immediately after, Miss Cook was found, tied, with the knots intact.

Mr. Varley attached a galvanometer to Miss Cook, so that any movement made by her would be shown by a deflection of the instrument; but there was no indication when Katie appeared, showing only the upper part of her body, though Mr. Varley was able to grasp her hand.

Eusapia's materializations have been fully observed by many competent experimentalists. I will speak of them at some length, for I have been present at close on two hundred séances with Eusapia.

Visible materializations are rare with her and in all my long experience I have seen none; I cannot remember having ever seen in these séances any human form, in whole or in part. Once I saw a kind of prolongation from her body, a kind of rod that touched my side, but this was in half-light and very fugitive. *Per contra,* I have been touched more than two hundred times when the control was excellent, by a seemingly human hand on my hands, my face, forehead, neck, and shoulders.

One such case, which seems to me perfect at all points, is the following—it took place at the Psychological Institute at Paris. There were present only Mme. Curie, Mme. X., a Polish friend of hers, and P. Courtier, the secretary of the Institute. Mme. Curie was on Eusapia's left, myself on her right, Mme. X. a little farther off, taking notes, and M. Courtier still farther, at the end of the table. Courtier had arranged a double curtain behind Eusapia; the light was weak but sufficient. On the table Mme. Curie's hand holding Eusapia's could be distinctly seen, likewise mine also holding the right hand. Long practice had taught me to hold the hand firmly, and I could also see both of Eusapia's white cuffs.

We saw the curtain swell out as if pushed by some large object behind it. It was said to be John's hand. I asked to touch it, and with my right hand, which was free, I touched this hand projecting through the curtain, high above Eusapia's head. I felt the resistance and seized a real hand which I took in mine. Even through the curtain I could feel the fingers, which seemed to me (though I cannot positively say so) much larger than Eusapia's little hand. I held it firmly and counted twenty-nine seconds, during all which time I had leisure to observe both of Eusapia's hands

on the table, to ask Mme. Curie if she was sure of her control, to call Courtier's attention, and also to feel, press, and identify a real hand through the curtain. After the twenty-nine seconds I said, "I want something more, I want *uno anello* (a ring) on this hand." At once the hand made me feel a ring: I said *"adesso uno braceletto,"* and on the wrist I felt the two ends as of a woman's bracelet that closes by a hinge. I then asked that this hand should melt in mine, but the hand disengaged itself by a strong effort, and I felt nothing further (the above is a combination of two separate experiments).

It seems hard to imagine a more convincing experiment, for in twenty-nine seconds the element of surprise is eliminated. In this case there was not only the materialization of a hand, but also of a ring. As all experiments demonstrate, materializations of objects, garments, and woven stuffs are simultaneous with human forms, these latter never appearing naked, but covered by veils which are at first white semi-luminous clouds which end by taking the consistence of real woven fabrics.

Having already described at full length the movements of objects without contact, there is no need to return to them, but it should be noted that the movements and materializations occur together. Everything takes place as though these movements were due to invisible materializations, paradoxical as that term seems. In the course of a séance one is touched ten or twenty times without being able to see anything, even though darkness is not total.

At Milan, two hands were heard in the air, clapping against one another. Raising one's hand very high one could feel what seemed to be a human figure, and on three different occasions one of the observers stated that he could see its hair and beard; the hair being stiff and short, the beard delicate, and the skin like that of a man. A piece of smoked paper was laid on the table, and on restoring the light, finger-marks were found on the paper, Eusapia's hands being quite clean. This was repeated three times, the third impression being that of a whole left hand.

The notes of one of my experiments at Milan read: "Eusapia says, 'Hold me firmly'; Schiaparelli on the right and Finzi on the left grip her hands well. I say to Finzi, 'You have hold of the left hand?' 'Yes.' To Schiaparelli, 'You have the right?' 'Yes.' To Finzi, 'You have hold of both feet?' 'Yes.' Then turning my

head slightly to the left I see the curtain swell, and am touched on the shoulder by a hand that seems to be a right hand, presuming that it came from the medium. Nearly at the same moment two fingers pulled my hair at the back of my neck, without hurting me, so that I am certain that a hand touched me on the shoulder and the neck."

At Agnelas, J. Maxwell saw a silhouette like that of a head with curly hair outlined against the wall of the room; and also, in the same manner, a hand and arm above the head of M. Sabatier, who felt himself touched at the same moment. The fore-arm was long and thin, coming out of the dark.

At the séances on Ribaud Island and in Paris, visible phenomena were few, the attention of the observers being devoted to observations on movements of objects. They were frequent at Genoa.

Morselli says (vol. i, 255), "I sat in a small armchair about two yards away on Eusapia's right. 'The invisible' arrived! Twice I was touched and clearly felt a hand in all respects like a living hand. My senses were fully awake. I can affirm that the thing that touched me was solid, resisting, impenetrable, and, in short, *material.*"

In the eighteenth séance at Genoa, the best of them all, in presence of Morselli, Porro, L. Ramorino, L. Vassallo, and Dr. Venzano, of the Minerva Circle, on December 23, 1901, in the dark, two invisible forms manifested which were afterwards seen by weak light. The first was a little deceased daughter of Porro who felt a child under a veil. We heard the child speak in a baby voice; she kissed Porro. This form could not be seen. Then another came, the son of Vassallo who died aged sixteen. This entity became visible; an almost phosphorescent ovoid appeared on Eusapia's right, moved slowly to the left about twelve inches and vanished. By red light an arm and hand were seen to proceed from the cabinet towards Vassallo. A third and a fourth entity appeared. The third was distinctly seen, but identification was doubtful. "In a room lit by five candles we all saw the two black curtains of the window near Eusapia stretch and swell out, *"e avanzarsi verso me e verso Porro come se dietro vi fossero due persone vive agenti con intelligenza e con volonta propria e distinta."* These two forms did not come beyond the curtains, but only showed hands and well-formed limbs. Morselli distinguished a right hand visible as far as the second finger: it was short, fat, and grey in colour, opening and shutting.

In another séance, the twenty-third, which was also a very important one, held in M. Avellino's house, Eusapia was fastened down on a bed placed behind the curtain. Then an apparition was seen of a young girl; the head, shoulders, and part of the bust being visible and perhaps slightly phosphorescent. A turban hid her ears, chin, and hair; she remained still for some twenty seconds. A second apparition then showed a tall man, with an abundant short beard, large head with prominent bones, and a thick neck. Four more appeared, first the head of a young woman in an oriental garb; the fourth was not completely formed, it seemed imperfect on the right side. Says Morselli, "I saw the eyes looking at me; although bright enough for me to see the reflection of the lights on the cornea, they seemed veiled. When I approached her, she made no attempt to retreat, but made a salutation with her arm and went. The fifth and sixth were of a woman of about fifty and a young child; these appeared together."

Previous experiments made with Eusapia at the house of Mme. Peretti should be mentioned, but these showed only imperfect forms, dark silhouettes, with heads hardly formed.

Although these experiments were under perfect control by very well-informed observers, they would be insufficient if they stood alone, but the innumerable instances of movements of objects without contact can be explained in no other way than by invisible materializations, and thus, following the scheme already outlined, we can assign three phases to these exteriorized phenomena, a first stage in which they are invisible, a second in which they begin to be visible but are still more or less amorphous, and a third stage in which they take on the semblances of a living organism surrounded by veils which at first mask the imperfections of form, but become thinner as the underlying form becomes more dense.

The experiments of F. Bottazzi, professor of physiology in the University of Naples, are most evidential, and would give, if they were wanting, decisive proofs of materializations and movements without contact.[1] These took place in the presence of Professors de Amicis, Scarpa, Pansini, and Bottazzi himself, provided with all modern instruments as for an experiment in physiology. "There were seen (p. 684) splendid levitations of the table to a

[1] *Dans les régions inexplorées de la biologie humaine, A. S. P.*, 1907, xvii, 645-664, 681-705, 749-771. *Fenomeni medianici*, 1 vol., 12mo, Napoli, Perella, 1909.

height of two feet from the floor, swaying in the air, untouched by Eusapia." Unknown to all present, Bottazzi had provided an electric button, which if touched would light a lamp. Eusapia, with her hands well held, repeatedly pressed the button with a fluidic hand and lit the lamp. Similar electric pushes placed in a cabinet behind the curtain were put into action while Eusapia struck blows with her hand on the table.

In another séance, Eusapia's hands and arms were tied with strong cords fastened to iron rings in the floor and secured with leaden seals. The fluidic hand then gave various objects—a trumpet and a vase of flowers—to Bottazzi.

In these séances numerous and striking materializations took place. While Eusapia was bound with strong cords M. Galotti saw two left arms (one natural and one fluidic) proceeding from her shoulder. Bottazzi experienced the crucial test of an ectoplasmic hand melting away in his grasp. He says, "I saw and felt at one and the same time a human hand natural in colour, I felt with mine the fingers and the back of a strong, warm, rough hand. I gripped it and it vanished from my grasp, not becoming smaller but melting, dematerializing and dissolving."

Under unexceptionable test conditions not only were there numerous touches, but fingers and hands, some frail and diaphanous, some thick and strong, and diverse figures and shades outlined behind the curtain.[1]

Bottazzi, who entered on these experiments with a sceptical mind, concludes: "The certitude we have acquired is of the same order as that which we attain from the study of chemical, physical, or physiological facts." That the professor of physiology in the University of Naples should express himself so strongly means that he must be absolutely certain.

Mme. Bloch also describes fluidic hands proceeding from Eusapia (*A. S. P.*, vii, 1897, 2-6). She says Eusapia's hands were held and were also in full view, and we saw a hand emerge from the white cloth behind her; an arm without a shoulder touched her head. Then the phenomenon increased, the hand came from below and threw on the table some pieces of music taken from the piano. The hand was not luminous, but was a hand of flesh similar to our own. There would have been plenty of time to photo-

[1] "I saw the apparition," says Bottazzi (p. 691), "and shuddered." For my own part, though I have very often experimented with Eusapia, I have never seen a distinct form. C. R.

graph it. The fore-arm was in a close-fitting sleeve of grey stuff: Eusapia had wide sleeves. This hand came from her skirt and not from her shoulder. Her hands were both seen and held the whole time.

M. Venzano thus describes the formation of these phantoms (*A. S. P.*, 1907, xvii, 514): "Some eight inches from my face there formed a vaporous, globular, whitish mass which condensed into an oval and gradually took definite shape as a head. The nose, the eyes, the moustache, and a pointed beard could be clearly seen. It came nearer to my face, I felt a warm and living forehead against mine; the pressure of a caress, and a kiss; then the whole dissolved in vapour towards the curtain. The other sitters saw only a vague, luminous appearance, but heard the sound of the kiss."

A. de Rochas narrates the experiments at Choisy, in presence of General Thomassin, J. Maxwell, De Watteville, and A. de Gramont. M. de Gramont saw a dark shadow like a hand outlined against the window; and the holding of the medium's hands was then verified. A moment later he felt his hand stroked by warm fingers that he could not take hold of.

These fluidic hands have been photographed under satisfactory conditions. G. de Fontenay, a skilful photographer and experienced man of science, was able to obtain striking photographs, one of which is reproduced here. The two hands are seen above Eusapia's head, her own hands being firmly held at the time. M. Cartier, one of the experimenters, says, "I did not for a single moment let go Eusapia's right hand." The other, M. Drubay, says, "I can affirm in the most positive fashion that during the whole of the sitting I never let go the left hand." It is therefore quite impossible that Eusapia should have been able to free both her hands just at the moment when control was necessarily strictest. An attentive study of the photograph shows that the hands are notably larger than Eusapia's hands.

Besides these photographs of hands there are others of the luminous mass usually seen in metapsychic photographs. Without insisting on the impossibility of Eusapia's contriving to put a handkerchief on her head and to take it away again while her hands were held, it may be remarked that the contours of this luminous hand are soft and indeterminate, while its brightness is much greater, as De Fontenay observes, than could be given by the handkerchief that it resembles.

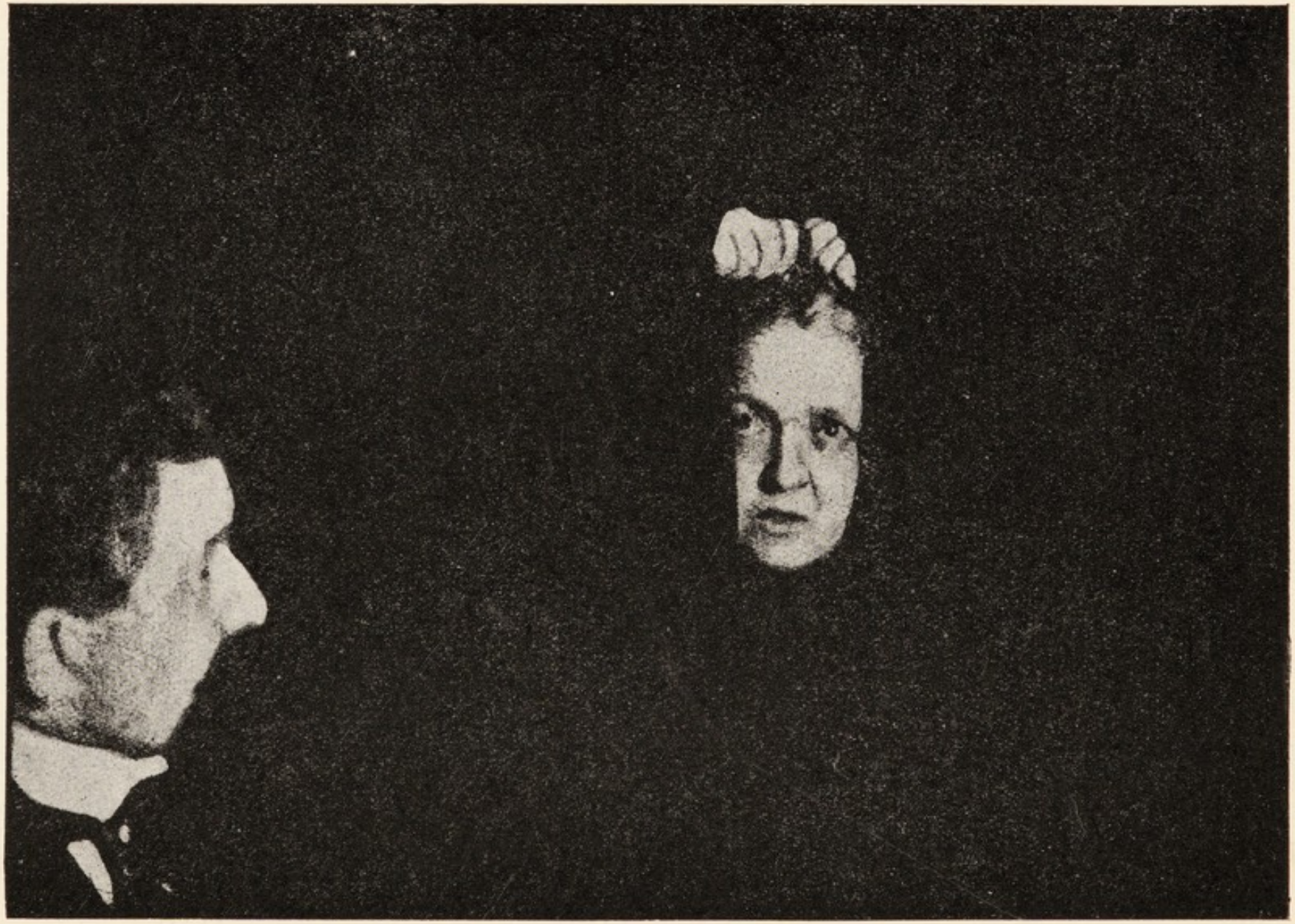


Fig. 19.—Eusapia Paladino. Photograph taken by G. de Fontenay.

Eusapia's two hands were held by the experimenters, nevertheless two hands are visible over her head.

Eusapia's materializations have been demonstrated not only by photography, but also by metapsychic moulds.[1]

Morselli reports one case of a mould of the face (very faint) under test conditions;[2] and he gives a reproduction of a much clearer impression of hands,[3] though in this latter case he thinks there may have been unconscious fraud.

Per contra, the plaster impressions obtained by De Fontenay are excellent. In an experiment during which Flammarion continuously controlled Eusapia's head and bust, the impression of a face was taken on plaster. It is manifestly Eusapia's face.

At Naples, E. Chiaja obtained numerous impressions on clay. Nevertheless these experiments are still open to discussion: those made at the Metapsychic Institute with Franek Kluski seem more conclusive, and we shall return to them later.

Traces of light gauze tissue protecting the face or the fingers from direct contact with the plaster or the clay may often be observed. This does not detract from the genuineness of the impress, for materialization of inert tissues always accompanies the materialization of living tissue. Moreover, how could actual gauze be handled and caused to disappear under the rigorous control that is exercised?

The materializations given by Marthe Béraud are of the highest importance. They have presented numerous facts illustrating the general *processus* of materializations and have supplied metapsychic science with entirely new and unforeseen data.[4]

After these strange facts had been verified by General and Mme. Noel in a series of experiments lasting nearly two years, M. Delanne, the editor of the *Revue du Spiritisme,* and myself were invited to Algiers by him. The first experiments[5] at which I was present impressed me greatly, but I always distrust first impres-

[1] *Voy. A. de Rochas, A propos d'Eusapia Paladino, Les séances de Montfort-l'Amaury, A. S. P.,* 1898, viii, 148. G. de Fontenay, *Les séances de Montfort-l'Amaury, Soc. des édit. scientifiques,* Paris, 1897.

[2] *Loc. cit.,* i, 430.

[3] *Loc. cit.,* ii, 348-349.

[4] Their bibliography is already voluminous, for they have provoked much controversy. The *pros* and *cons* will be found in Grasset's *L'occultisme hier et aujourd'hui,* 2d edit., Montpellier, 370-374. After sixteen years the objections put forward seem very poor, and deserve only disdain.

[5] A naval officer, Captain Démadrille, and a physician, Dr. Decréquy, witnessed these experiments and corroborated them. Their narratives have been published in part in the *A. S. P.* These notes and sketches confirm our later experiments in a very interesting manner.

sions. In the following year I returned to Algiers resolved to repeat the experiments under more rigorous conditions.

The medium was Marthe Béraud, the daughter of an officer, betrothed to General Noel's son, who died in the Congo before the marriage. She is a very intelligent and lively young lady, wears her hair short, and is a bright-eyed brunette. Subsequently to the Algiers experiments she has given proofs of strong mediumistic powers. She was the subject observed by Mme. Bisson and Dr. Schrenck-Notzing under the pseudonym of Eva.

The experiments at Algiers were held in a small, isolated building over a stable. The window was blocked up and remained shut at all times. The only door was locked at the beginning of

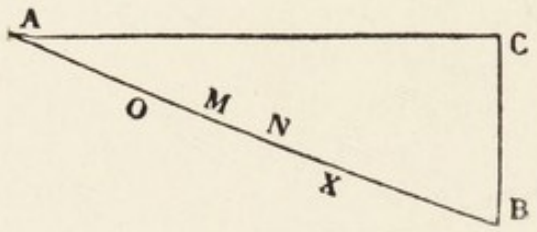


Fig. 20.—Diagram of the cabinet at the Villa Carmen.

A B, the curtains, opening at M, N. M, Marthe's chair; N, that of Aischa. We were before the curtain. X, place of origin of the materialization that moved to O.

every séance. It is the only room in the building, and before every séance everything was minutely inspected by Delanne and myself. Two curtains were stretched across one corner of the room as shown in Fig. 20, the curtain being about two and a half yards long, so as to make a kind of dark cabinet. We sat about half a yard, or even sometimes nearer, in front of these curtains. Those present were General and Mme. Noel, Mlle. X., Delanne, and myself, also Marthe Béraud's two younger sisters, Marie and Paule, who sat far from the curtain. Light was given by a photographer's red lamp. Within the curtains were two chairs, minutely inspected, one for Marthe and one for a negress, Aischa. The part played by Aischa seems absolutely nil. Mme. Noel made a point of her being present, but our best results occurred in Aischa's absence.

Everything that took place in the room could be seen perfectly

well, and I am absolutely certain that no stranger could enter during the séances.[1]

As Marthe was not tied, nor her hands held, the conditions of control were less severe than in Eusapia's case; they were, however, strict enough to allow of a definite opinion.

After a variable period, sometimes immediately, sometimes after an hour, or even two hours, the curtains drew apart, and we could see Marthe and Aischa each sitting on her chair seemingly asleep. It is needless to add that after each séance everything was minutely examined. Marthe was not undressed, but in that very hot climate she wore only a thin dress, and as I made magnetic passes over her to awake her from trance, I could be sure, by passing my hand all over her body, that she had nothing on her but this thin garment.

It is useless to incriminate Aischa, an unintelligent creature sitting passively beside Marthe, to the great annoyance of the latter; for in the tropical heat the odour of the negress was unbearable: and in the more effective experiments Aischa was not present.

It is therefore established that there was no instrumentation and no theatrical accessories that the medium could use, and that no stranger could enter the room.

The materializations produced were very complete. The phantom of Bien Boa appeared five or six times under satisfactory conditions in the sense that he could not be Marthe masquerading in a helmet and sheet. Marthe would have had not only to bring, but also to conceal afterwards, the helmet, the sheet, and the burnous. Also Marthe and the phantom were both seen at the same time. To pretend that Bien Boa was a doll is more absurd still; he walked and moved, his eyes could be seen looking round, and when he tried to speak his lips moved.

[1]I make a point of this because of the assertions of Areski, an Arab coachman dismissed by General Noel for theft, who said that he "played the ghost." A certain starvelling practitioner of Algiers, Dr. R., was ill-advised enough to entertain this man and to exhibit him in public at Algiers in a white mantle to play the ghost before spectators. That is the most that has been said against the experiments at the Villa Carmen. The general public, blinded by ignoble newspaper tales, imagined that the fraud had been exposed. All that was really proved was: that an Arab thief could lie impudently, that he could put on a sheet, could appear thus on a stage, and could get a doctor to endorse his lies. It is averred also that Marthe confessed fraud to an Algerian lawyer who took a pseudonym. But even if this anonymous allegation were true, we know the value to be placed on such revelations, which only show the mental instability of mediums.

He seemed so much alive that, as we could hear his breathing, I took a flask of baryta water to see if his breath would show carbon dioxide. The experiment succeeded. I did not lose sight of the flask from the moment when I put it into the hands of Bien Boa who seemed to float in the air on the left of the curtain at a height greater than Marthe could have been even if standing up. While he blew into the tube the bubbling could be heard and I asked Delanne, "Do you see Marthe?" He said, "I see Marthe completely." Aischa was far off and could be seen clearly, asleep in the other corner of the cabinet. I could myself see the form of Marthe sitting in her chair, though I could not see her head and her right shoulder.[1]

However striking this was, another experiment seems to me even more evidential: Everything being arranged as usual (except that Mlle. X., being indisposed, was absent), after a long wait I saw close to me, in front of the curtain which had not moved, a white vapour, hardly sixteen inches distant. It was like a white veil or handkerchief on the floor. This rose and became spherical. Soon it was a head just above the floor; it rose up still more, enlarged, and grew into a human form, a short bearded man dressed in a turban and white mantle, who moved, limping slightly, from right to left before the curtain. On coming close to General Noel, he sank down abruptly to the floor with a clicking noise like a falling skeleton, flattening out in front of the curtain. Three or four minutes later, close to the general, not to me, he reappeared, rising in a straight line from the floor, born from the floor, so to say, and falling back to it with the same clicking noise.

The only un-metapsychic explanation possible seemed to be a trap-door opening and shutting: but there was no trap-door, as I verified next morning and as attested by the architect.

Delanne saw the same phenomenon, but as he was a little farther off than myself, he could not see the emergence of the phantom from the floor as well as I could.

It seems to me impossible, however slight and supple Marthe may be, that she should creep under the curtain without disturbing it and give the illusion of a person rising straight from the floor; and how can the head, standing as if decapitated, be ex-

[1]A comical incident occurred at this point. When we saw the baryta show white (which incidentally shows that the light was good), we cried "Bravo." Bien Boa then vanished, but reappeared three times, opening and closing the curtain and bowing like an actor who receives applause.

plained, and the sinking into the floor afterwards? when very shortly after we saw Marthe sitting quietly in her chair, asleep.

Several photographs were taken by Delanne and myself, stereo-



Fig. 21. — Photograph of Bien Boa. Marthe is seen seated. Note the helmet covered with drapery, the height of the figure which is in front of Marthe, not apparently supported by lower limbs. Her stereoscopic photograph is much better than this one.

scopic and other. They show some interesting details on which Sir Oliver Lodge has made acute criticisms, saying that they were the best metapsychic photographs that he had seen.

The softness and semi-vaporous outline of the hands are curious; likewise the veil surrounding the phantom has indeterminate outlines contrasting strongly with the sharp outline of Aischa's shoulder. A thick, black, artificial-looking beard covers the mouth and chin. A whitish fluidic mass is noticeable in front of the curtain. This cannot be a photographic error, though we only noticed it on the plate; it appears on both photographs taken with different cameras. The plane of the phantom is in front of Marthe. Bien Boa would seem to be a bust only floating in space in front of Marthe, whose bodice can be seen. Low down, between the curtain and Marthe's black skirt, there seem to be two small whitish rods like supports to the phantom form.

The only defective side to the experiment as evidenced by the photograph is that Marthe's left arm which seems resting on Aischa's chair appears empty, though the vacuity is not complete; but Marthe's bodice, knees, and body are so clearly discernible that this apparent emptiness of the left sleeve does not seem to be a serious objection, though I am careful to draw attention to this point.

It is absolutely impossible that this phantom should be a stranger invading the cabinet; and it is impossible that Marthe could have invested herself with a helmet and sheet, and induce at the same time the white cloud in front of the curtain. Everything happens as though fluidic vapour emerged from her head and her right side, masking both, and rising into the air without any means of support but her head and body.

At the Villa Carmen I saw another very well-defined materialization, now published for the first time.

On the day preceding my departure, after a long stay at Algiers, Bien Boa, speaking by the voice of Marthe,[1] said, in order to detain me, "Stay! You will see her whom you desire." It will easily be understood that I stayed.

On the next day almost as soon as the curtains were drawn, they were re-opened, and between them appeared the face of a young and beautiful woman with a kind of gilt ribbon or diadem covering her fair hair and the crown of her head. She was laughing heartily and seemed greatly amused; I can still vividly recall her laugh and her pearly teeth. She appeared two or three times

[1]Her voice was halting and wooden and guttural, a sort of Punchinello's voice.

showing her head and then hiding it, like a child playing bo-peep. Then she refused to return. The general said to me, "Put your hand behind the curtain and you can touch her hair," which I did; and he added, "It is soft like silk, is it not?" I replied, "Excuse me, it is more like horse-hair," and in fact this was the sensation produced. I then received a light tap on the back of the hand; the hair was felt no more and a voice from behind the curtain said, "Bring scissors tomorrow." I brought the scissors next day. The Egyptian queen returned, but only showed the crown of her head with very fair and very abundant hair; she was anxious to know if I had brought the scissors. I then took a handful of her long hair, but I could scarcely distinguish the face that she kept concealed behind the curtain. As I was about to cut a lock high up, a firm hand behind the curtain lowered mine, so that I cut only about six inches from the end. As I was rather slow about doing this, she said in a low voice, "Quick! Quick!" and disappeared. I have kept this lock: it is very fine, silky, and undyed. Microscopical examination shows it to be real hair; and I am informed that a wig of the same would cost a thousand francs. Marthe's hair is very dark and she wears her hair rather short.

It would seem that the purpose that this Egyptian princess had in view was that I should cut off a lock of her hair (?), for I saw her no more. Next day, on visiting Mme. Noel who was ill, I half saw, very vaguely, a fugitive form in the dressing-room which vanished as I approached. But my recollection of this is very undefined.[1]

With other powerful mediums and before 1905, General Noel had notable spiritist manifestations. Both he and Mme. Noel and M. Démadrille, now a captain in the navy, clearly saw the phantom of Bien Boa and by his side the medium Vincente, at the same moment. Dr. Decréquy, also present, certifies the same. Sketches were made that were reproduced in the *Annales*. Captain Démadrille says: "The curtain opened and Vincente came out: I could see his whole figure; then B. B. came out of the cabinet, seeming to hold it up with his right arm. The curtain fell to behind him and both remained standing. I took B. B.'s hand; the skin felt stiff and cold, the arm was very cold, stiff and cold like that of a corpse."

[1]See in the *Psychische Studien* for 1906, various criticisms relating to these experiments. L. Deinhard, *Die Materialisationssitzungen in Alger*, pp. 74 and 137. Bormann, *Bien Boa und der Wascheposantz*, p. 200, col. 9.

M. C., a cavalry officer, with other mediums than Marthe, and by strong red light, saw clearly the features of a living form only a few inches from his eyes. The form was that of M. de Quillac whose widow was present. Both mediums could be seen seated asleep in their chairs at the same moment as the apparition.[1]

Our study of materializations has lately had the benefit of many valuable observations very effectively made by Schrenck-Notzing and Mme. Bisson.[2]

Very numerous photographs, more numerous and more instructive than have before appeared, accompany the text and enable the sequence of phenomena to be intelligently followed.[3]

In these experiments, which lasted over four years and were conducted with admirable care and patience, minute precautions were taken against fraud. At each séance the cabinet was closely searched, Eva was completely undressed and in presence of the experimenters clothed in a close-fitting garment covering her from head to foot. Her head was covered by a veil of tulle sewn to the other garment. Her hair, armpits, nose, mouth, and knees were examined; in some cases even examination *per rectum et vaginam* was resorted to. As the materialized substance frequently comes from her mouth, syrup of bilberries was administered, whose deep colouring powers are well known, but notwithstanding this the extruded forms were absolutely white. Experimental rigour was even pushed to the point of giving her an emetic before a séance.

The light in front of the curtain was sufficient to allow large print to be read. Behind the curtain were a red and a white light that could be put on at will. Three cameras, one being stereoscopic, were focussed on the cabinet ready to be worked at a signal; sometimes there were as many as nine. Eva, having been undressed in full light and clothed as described above, was brought into the cabinet and the curtains were drawn, the light reduced, and the experiments began.

Under these circumstances it seems physically impossible that

[1] *A. S. P.*, 1906, 255. *Les dernières séances de la villa Carmen.*

[2] *Les phénomènes dits de matérialisation*, by Juliette Alexandre Bisson, with preface by J. Maxwell, 8vo, 1 vol., Paris, Alcan, 1914. Schrenck-Notzing, *Materialisationsphaenomene*, E. Reinhardt, Munchen, 1914. This work was translated into English in 1919.

[3] Grasset, in his book published in 1908, accepts (without advancing any proofs) the idea that Areski intruded into the cabinet at Algiers, absurd as that notion is. He could not anticipate that Marthe would give fine instances of materialization five years later, confirming the results at the Villa Carmen, although her mediumship there and at Paris took very different forms.

any fraud could occur. The notion that an accomplice could enter is absurd; the hypothesis that Eva might bring various objects with her is equally ridiculous. Moreover Eva lives with Mme. Bisson, who rarely leaves her; the two ladies take their meals together and sleep in the same room. Even making the monstrous supposition that Mme. Bisson is capable of bad faith, she could not have deceived Schrenck-Notzing, Dr. Geley, J. Maxwell, Dr. Bourbon, M. Chevreul, C. de Vesme, G. de Fontenay, and myself for three years, and also others who assisted at the experiments. Add to this that there were séances at Paris, Biarritz, and Munich extending over four years.

The phenomena of materialization produced were most striking.

Essentially they consist in a luminous and plastic emanation proceeding usually from her mouth, sometimes from her navel (when alone with Mme. Bisson she was completely nude); sometimes from her breast; sometimes from her armpits. It is a whitish substance that creeps as if alive, with damp, cold, protoplasmic extensions that are transformed under the eyes of the experimenters into a hand, fingers, a head, or even into an entire figure.

It is impossible to give all particulars. I therefore quote the séance of April 15, 1912, in the presence of C. de Vesme and P. Bisson.

"The manifestations began at once. White substance appeared on the neck of the medium; then a head was formed which moved from left to right and placed itself on the medium's head. A photograph was taken (Figs. 73, 74, pp. 108, 109). After the flashlight, the head reappeared by the side of Eva's head, about sixteen inches from it, connected by a long bunch of white substance. It looked like the head of a man, and made movements like bows. Some twenty appearances and reappearances of this head were counted; it appeared, retreated into the cabinet, and emerged again. A woman's head then appeared on the right, showed itself near the curtains, and went back into the cabinet, returned several times and disappeared."

On the 30th of August, 1912, another experiment was made at Munich by Dr. and Mme. Schrenck-Notzing and Dr. Klapka, which is specially interesting because a rough attempt was made to detect fraud (Schrenck-Notzing, p. 329).

The white substance was seen on the medium's left shoulder, then on her abdomen. Dr. Klapka verified that Eva's hands were



Fig. 22.—Ectoplasm of Marthe-Eva (After Mme. Bisson and Schrenck-Notzing).

Enlargement of the negative. On the right the head of Marthe, whose neck and chin are clearly visible. Fluidic extended matter that seems to proceed from her hair and neck hangs down like bonnet-ribbons.

On the left the beginning of a materialized face, still imperfect and covered by a veil. The nostrils are barely found (experiment of December 30, 1911).

in sight holding the curtain during the whole time. A white and brownish mass was visible on Eva's knees. On a sign Schrenck entered the cabinet suddenly, put on the light, and took Eva's hands, while Klapka tried to seize the white substance, but could grasp nothing, for it disappeared at once. The experiment was resumed, in spite of the terror evinced by Eva of this attempt, and the face of a man appeared, which vanished after a few seconds.

At the séance of June 13, 1913, in presence of Dr. Bourbon and Mme. Bisson (see p. 208), the substance emerged from the medium's mouth; at its end was a materialized finger. M. Bourbon took hold of this as it came from Eva's mouth, and verified the bone in it, and also that it was flexible. This finger came right through the tulle with which the medium's head was covered, the tulle showing no sign of being torn (Schrenck-Notzing, Pl. xxi). The apparition (the form of a man, much larger than Eva, with long moustaches) came out of the cabinet, began to speak, and went to Mme. Bisson, who kissed him on his cheek. The sound was quite audible.

The experiment of November 30, 1912 (Schrenck-Notzing, p. 379 and Fig. 107, Pl. xi), is particularly interesting. Both of Eva's hands can be seen holding the curtain. The white substance then exuded from the left shoulder, falling over the chest. This substance became more and more dense and finally took the shape of a human face; Schrenck, who up to that time had kept Eva's hands in sight or had held them, let go his hold at Eva's request, and the form then became clearer.

It is to be noted that these faces (and many others), as shown by the photographs, are not in relief. They are like drawings; and, more strange still, something like folds in the paper of a drawing are visible; as if a drawing had been folded three or four times and unfolded to be photographed, so that the materializations are in these cases flat, or materialized drawings.

These folds in flat images gave immense suspicion of fraud. But that presumes extreme stupidity in Eva, since she knew that photographs would be taken. How should she have been so unskilful as to present such things to the camera along with the other evidences of extraordinary faculty?

It must, moreover, be supposed that she had brought these drawings and made them vanish again. This hypothesis of drawings brought and hidden cannot be sustained; for, in the first place, the flat images appeared in cases when her hands were never out

of sight; and, secondly, the extreme rigour of the conditions, and the minute examination of her person before and after the séances, makes it impossible to understand how she could have secreted large drawings; thirdly, these appeared outside the veil of tulle that covered her; and fourthly there were very evident movements, quite life-like, in these images that succeeded one another rapidly and seemed to be living things.

The fact of the appearance of flat images rather than of forms in relief is no evidence of trickery. It is imagined, quite mistakenly, that a materialization must be analogous to a human body and must be three-dimensional. This is not so. There is nothing to prove that the process of materialization is other than a development of a completed form after a first stage of coarse and rudimentary lineaments formed from the cloudy substance.

The moist, gelatinous, and semi-luminous extensions that proceed from the mouth of Marthe-Eva are embryonic formations which tend towards organization without immediately attaining it. Perhaps with other mediums such as Home and Florence Cook the organization into living form takes place more rapidly; but in Eva's case it is slow, progressive, and difficult.

Schrenck has examined microscopically residues of the amorphous substance, and has found vestiges of epithelium, bacterial forms, and a notable amount of fat. In certain cases it looked like vegetable tissue; in others like a filament of cotton surrounded by a granular substance whose nature could not be determined.

These remarkable experiments by Schrenck-Notzing and Mme. Bisson confirm yet once again the phenomenon of ectoplasm. After the experiments by Crookes, Mme. d'Espérance, P. Gibier, and those at the Villa Carmen, it would seem impossible to cast doubt upon this extraordinary and extremely rare but real phenomenon.[1]

[1]Acrimonious (and ineffective) criticisms have appeared in Germany; notably that of Mme. Dr. Mathilde von Kemnitz. Schrenck-Notzing replied to her vigorously, and also to Dr. von Gulat-Wellenburg, *Der Kampf und die Materialisationsphaenomene, Verteidigungsschrift* (München, Reinhardt, 1914).

See also *La querelle des phénomènes de matérialisation*, by A. von Schrenck-Notzing, *A. S. P.*, May, 1914, xxiv, 129-149. Schrenck has demonstrated that a careful examination of the photographs shows that they are not reproductions of those that appeared in the *Miroir*. Mrs. Barclay, who in the *Psychic Magazine* thought to prove fraud, merely proved that she had neither read the detailed accounts of the experiments nor carefully examined the photographs.

Schrenck had, moreover, employed detectives for several months, who sought by every possible means to discover or even to provoke fraud. They got nothing.

The phenomena that Schrenck-Notzing and Mme. Bisson have verified with Eva bring fresh evidence on the formation of ectoplasms, evidence that is of high theoretical importance. The word "ectoplasm," which I invented for the experiments with Eusapia, seems entirely justified. The ectoplasm is a kind of gelatinous protoplasm, formless at first, that exudes from the body of the medium, and takes form later. This embryo-genesis of materialization shows clearly on nearly all the photographs. In the early stages there are always white veils and milky patches and the faces, fingers, and drawings are formed little by little in the midst of this kind of gelatinous paste that resembles moist and sticky muslin.

To establish the truth of these phenomena of materialization and their embryo-genesis by formal proof I will here give, almost unabbreviated, the first notes of the experiments made by me with Marthe at the house of Mme. de S., under conditions that rendered fraud impossible, in September, October, and November, 1906.

I did not publish them at the time because they seemed to me so extraordinary that I wished to confirm them further by fresh experiment, but Marthe was then engaged on other studies with Mme. Bisson.

In some respects my experiments give more detail than those of Schrenck and Mme. Bisson; for I could follow the whole sequence of the embryo-genesis. I took no photographs; a serious omission doubtless, but one that is fairly compensated for by the fact that I could follow with the eye the detail of organization without those intermissions of observation while the curtain is drawn; this continuous observation is not permitted by the medium when waiting for the photograph, and herself giving the signal to the photographer. Moreover, mediums are always more or less in fear of the flashlight, and I have reasons to think that this terror of the flash involves some check to the phenomena.

It is probable, too, that Marthe's mediumistic powers have altered and that their modalities have varied. At Mme. de S.'s house the phenomena were different from those at Algiers, more like those presented with Mme. Bisson and Schrenck-Notzing some years later.

I quote textually my notes of 1906.[1]

[1]These notes, which I intended one day to publish, seemed to me so important that I confided them to my friend Georges Lyon, to be published after my death. He returns them to me at my request.

"In the quite small room which I search thoroughly, a corner, curtains that can be closed and opened before the corner. A cane chair in the middle on which Marthe sits. Mme. de S., whom I will call A., is alone with Marthe and myself. We both sit close to Marthe, so close that I can touch her hands without getting up. The light is an electric lamp covered with red stuff, and gives light enough to show all the white in Marthe's garments and the white ribbons in her hair. After about half an hour, I open the curtains and see a faint luminosity on the floor, so feeble that I doubt its reality. By degrees this light increases; it is like a small, luminous handkerchief lying on the floor. Marthe's whole body is motionless. The luminous spot grows; its outlines are milky, undefined and cloudy, less defined and softer than would be those of a woven stuff. It approaches the chair, increases in size, and takes a serpentine form which tends to rise towards the left arm of A.'s chair. Its outlines become sharper; it is like a mass of half-empty fabric. Then follows an extraordinary sight: a point detaches itself from the mass, mounts up, bends and directs itself to Marthe's breast, her hands being held the whole time. The point continues to advance in a terrifying way like an animal pointing its beak; and as it advances, on the rigid stalk there appears a thin gauzy structure like a bat's wing, so thin and transparent that Marthe's garments can be seen through it. The stem is easily distinguishable from the membrane round it. Marthe is motionless and speaks at intervals.

"I can approach and look very closely, only an inch away. I see what looks like a swollen substance, moving as if alive, and changing its form. For five or six minutes I examine it attentively. I see extensions like the horns of a snail, which start up to right and left; these horns are like transparent gelatine, they project from and sink back into the more defined central mass.

"Marthe gets up. I take her hands. By raising and lowering her hands I seem to attract the point of the mass of substance. There seems now only a sort of veil suspended from my hand which holds both of Marthe's hands; but I can feel nothing. I made a slight movement with my little finger, the mass shortened by a few inches and mounted once more."

This amazing experiment, the first, was followed by yet another, the third, still more strange, on October 20th, which took place during the day with quite enough light to see by. For the sake of brevity I pass over experiment number two of the 18th, at

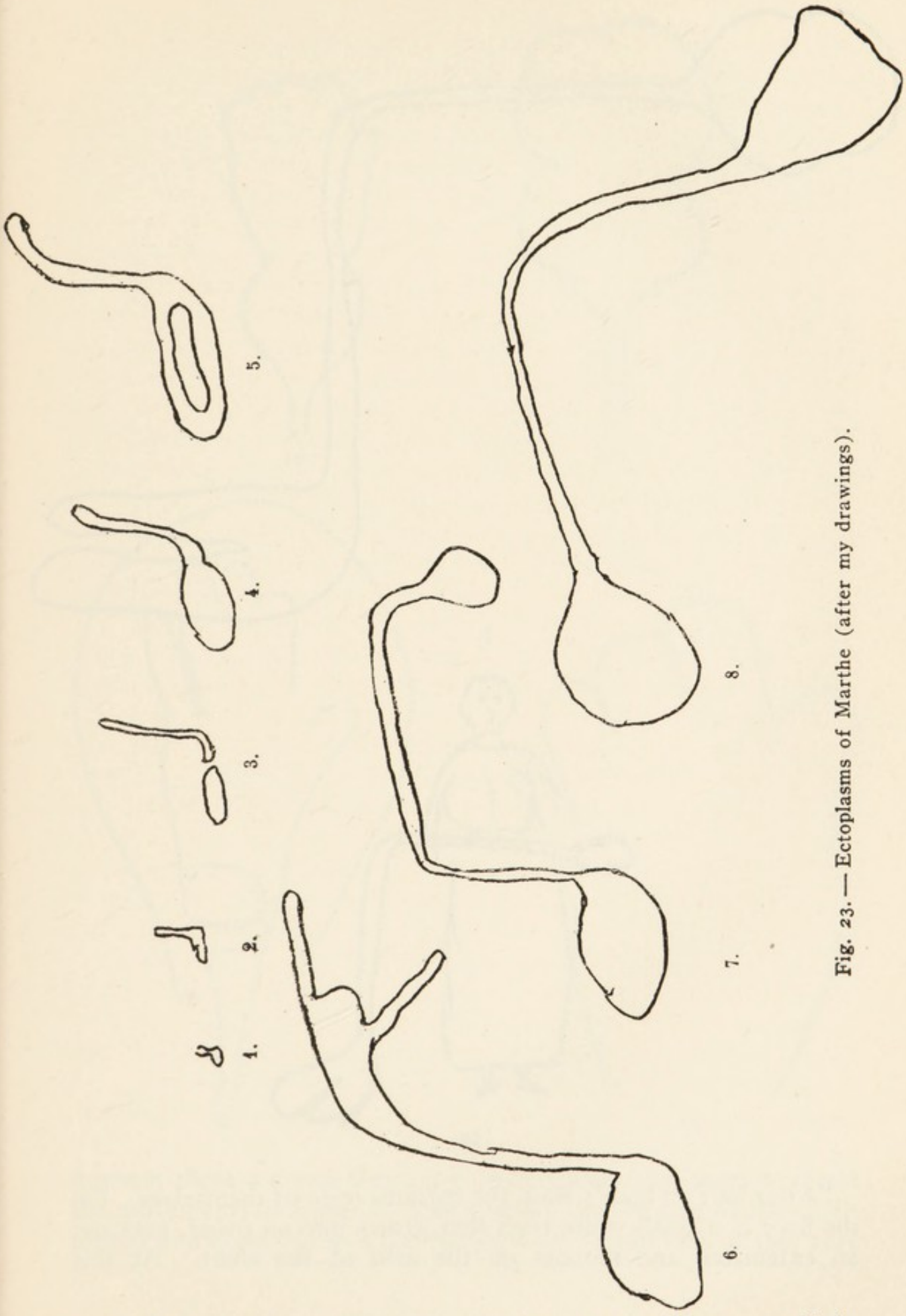
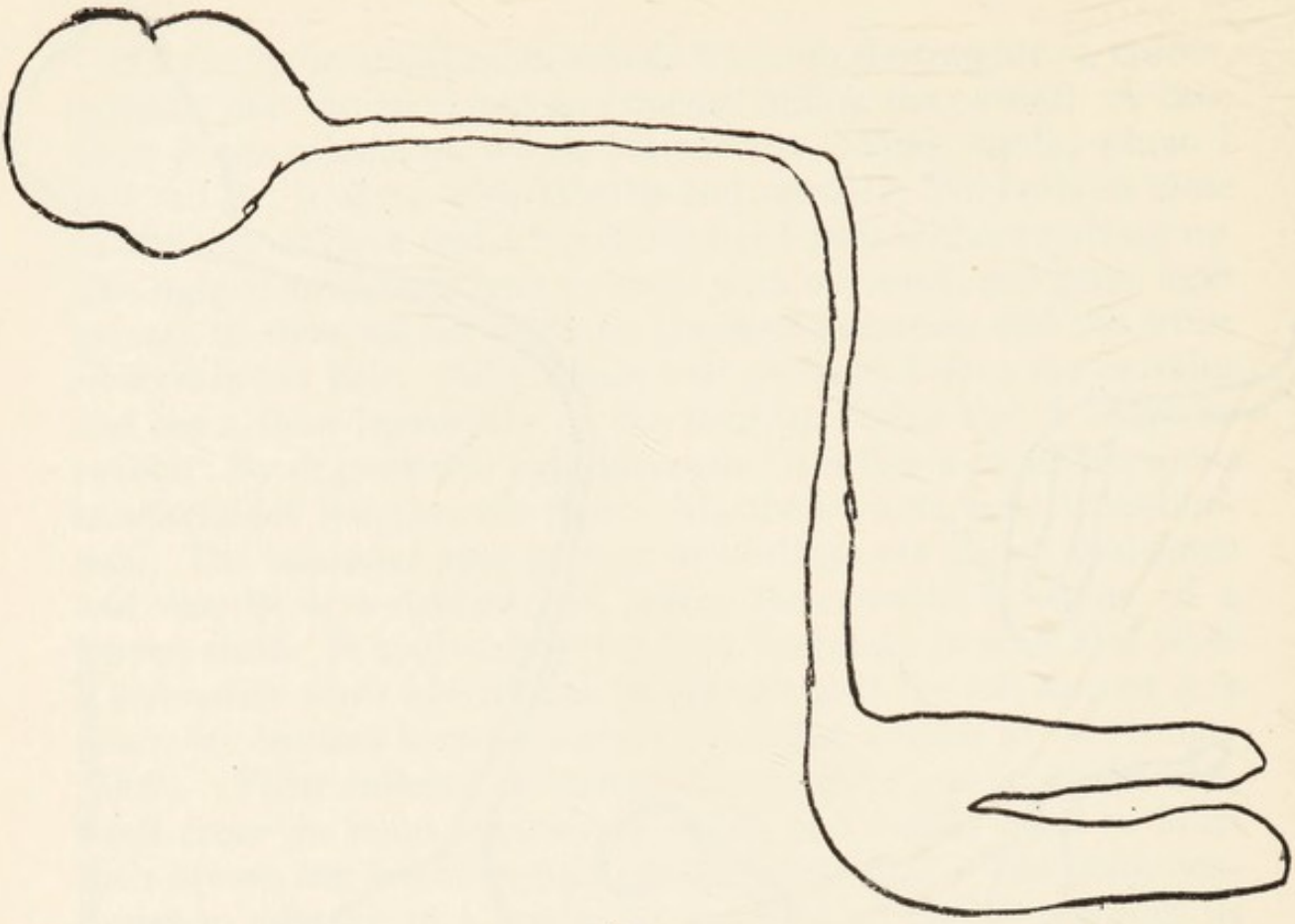


Fig. 23. — Ectoplasms of Marthe (after my drawings).

which the phenomena above described recurred. There was light enough, even in the cabinet, to read the title of a book.

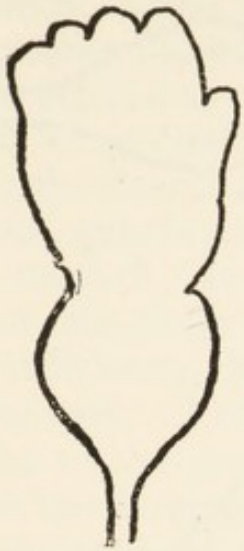


9.

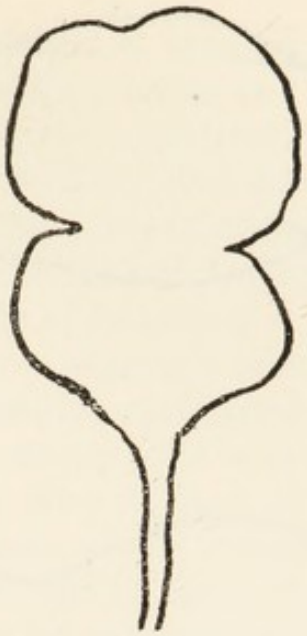


9a.

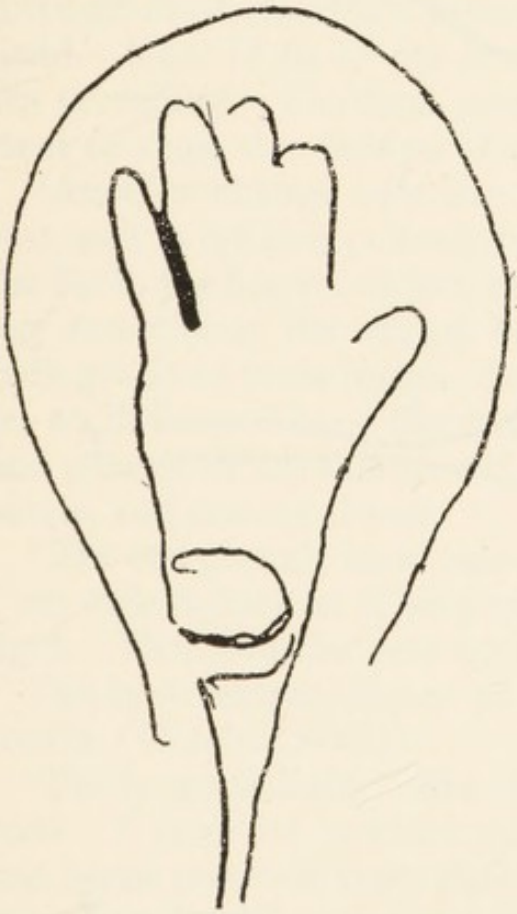
"After half an hour's wait, the curtains open of themselves. On the floor is a small white tract that grows into an ovoid, puts out an extension, and mounts on the arm of the chair. At this



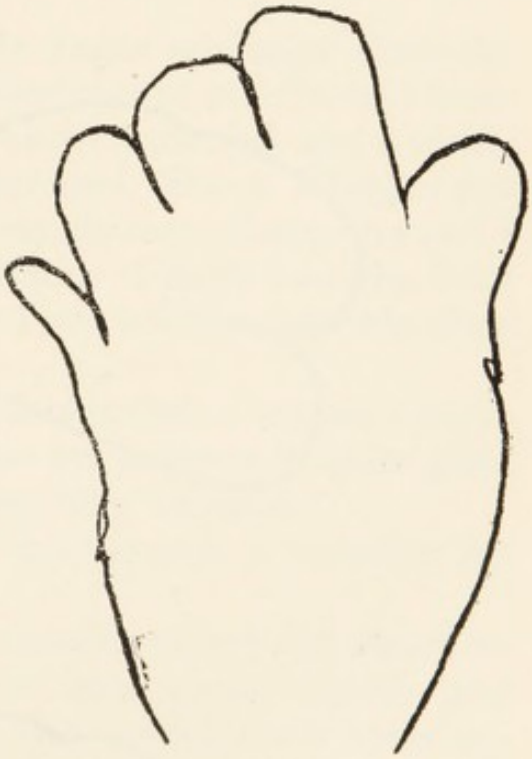
10.



11.

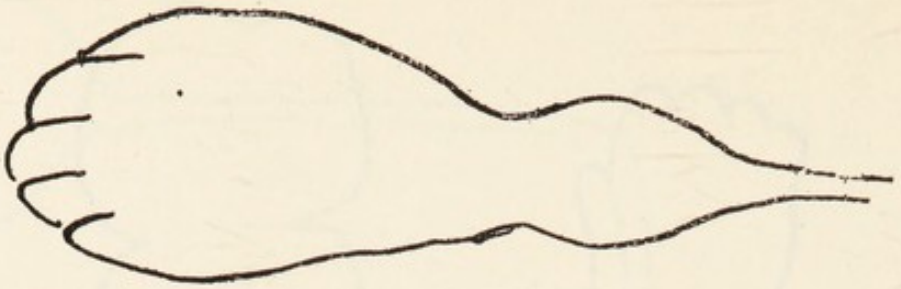


12.

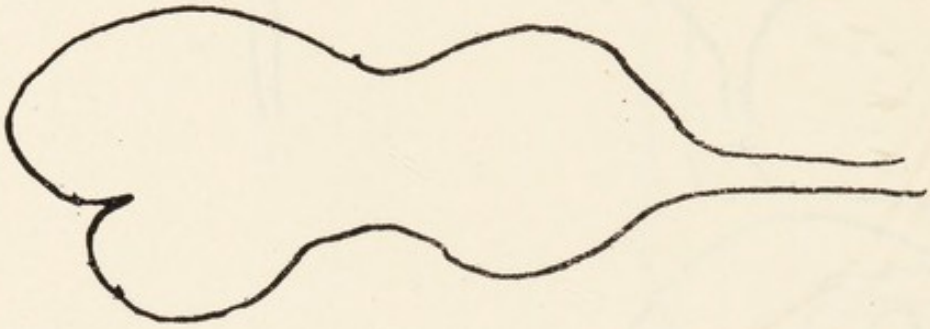


13.

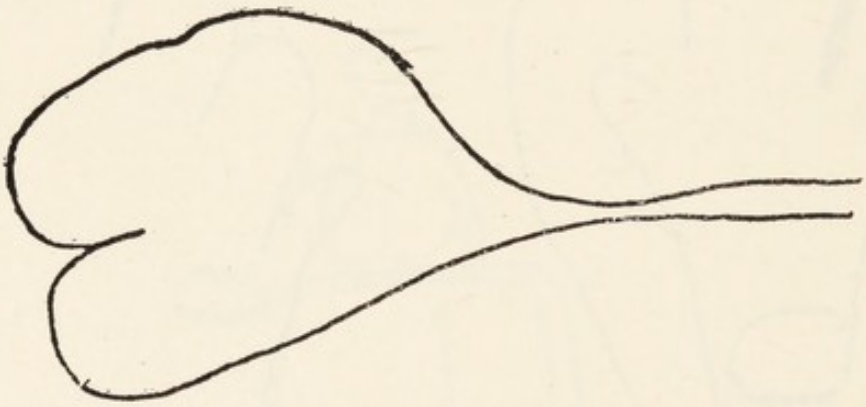
moment there are two horns like snail's horns that seem to direct the movements of a part, B, that climbs over the arm of the chair, united to a mass, X, that lies on the floor. I can look at this very



17.



16.



15.



14.

closely: the stem is a greyish white, less white than the trimming of Marthe's bodice and softer in outline. There are swellings in it like an empty snake-skin whilst the two masses, B and X, seem

to swell and get fuller. Slowly the mass X mounts up and the mass B descends, so that X is on Marthe's knees and B below it, the latter becoming the base on which the whole formation rests, for it spreads out like an amœba on the floor, and takes the form of a split base (two feet?). While these two parts continued to flatten out on the floor I had plenty of time to look very closely into the greyish, gelatinous, and barely visible mass X. I was not permitted to touch it. It was then on Marthe's knees. It then slowly divided into clefts at its extremity, resembling a hand, in embryo, but sufficiently clear for me to say that it is a left hand seen from the back. *Vide* Fig. 23: Nos. 1, 2, 3, 4, and 5 are rough sketches of the successive phases of the ectoplasm on the floor: 6 shows the development of the 'snail's horn' formation: 7, 8, and 9 are the series of forms taken by the ectoplasm mounting on to Marthe's knees: 9a shows the portion on the ground and the disposition on Marthe's figure: 10 to 13 show the growth of the hand. Nos. 14 to 17 are from another experiment analogous to the preceding. The final result was a stump ill-formed but sufficient to show the embryo of a hand.

"Another change sets in: the little finger separates from the rest, and in the grey, cloudy mass a hand can be clearly seen from the back, the fingers closed, the little finger extended, and a swelling resembling the carpal bones appeared, like a Röntgen-ray radiograph of these bones. Soon the cloudy mass disappears and I see an ill-formed hand like a cast in plaster. I think I see the folds and creases in the skin slowly form. I am holding both Marthe's hands, and can see them.

"The ectoplasmic hand seems solid, larger than a woman's hand. I am able to look at it very closely for ten minutes in quite good light. Then Marthe gets up and everything vanishes."

The most extraordinary of all the experiments is certainly the fourth (October 20th):

"Fairly good light. The curtain remains closed for about an hour. I open it; a white spot on the floor grows rapidly, and two horns protrude from the mass X, from which other horns appear, very mobile, pointing in every direction. The mass, then much larger, disaggregates into particles, taking on the semblance of a hand; it does not look like the cast of the previous day, it is a greyish hand with ill-defined outlines.

"This hand moves, looking like the hand of a mummy emerging from some stuff; it raises and lowers itself like a hand. Marthe's

hands are firmly held by me and are quite motionless. The fingers of the ectoplasm, thin and spindly, seem to end in cloudy masses. I can examine them very closely. I touch one of these spindles; it feels like a cold liquid. I can press it and it feels like the bone of a finger covered with skin. The hand rests on my knee and I feel the slight friction of a body of little resistance. The hand then rises of itself, swaying on a long stem that connects it with the floor; it falls back on to the floor with a slight noise; it remains there and I *think* I see the two bones of the fore-arm as though wrapped in cloudy muslin.

"The hand then rises, bends, and moves towards me. The wrist is lowered and the fingers pendant; they move and there seems a torsional movement of this strange fore-arm. I still think I see the carpal bones in the muslin-like cloud.

"The hand rests on my knee again. I feel its weight (very light), it makes little movements at my request that I can feel quite well. Then Marthe says to me, 'That is the muscles beginning to form,' and I see, or I think I see, something dark in the space between the two bones. The hand rises and moves very close to me, having no connection with the ground but a slight white trail. It then falls to the ground with a slight noise, rises from it and suddenly disappears at the moment that Marthe gets up."

The final experiment is less striking. There would seem to have been an endeavour to present a different phenomenon which could not reach its full development:

"After a long wait (an hour) Marthe opens the curtains. She can be seen sitting quite still. On her left shoulder is a whitish mass perhaps slightly luminous, though I could not state that it was markedly so. This gleam, at first indistinct, gradually takes the shape of drapery and disappears into Marthe's body. Then there appears a kind of cloud that seems to me weightless (?) as if thrown across Marthe's neck and bust, but this is very fugitive.

"Then a phenomenon of great importance takes place, unfortunately much more rapid than those previously verified. About half a yard from Marthe there appears a kind of doll without a face, quite indistinct and barely a yard high. A very small head, two long sleeves, and scarcely any legs, the whole under a kind of drapery or shimmering light. This lasts about half a minute; the whole form then sinks to the ground, and nothing remains but the globular form of the head, which lasts about half a minute and disappears."

The last of the phenomena was very distinct and fully visible (I copy my notes *verbatim*):

"Luminous prolongation seeming to proceed from the junction of the neck with the back, seen from behind. Marthe's two hands are visible and have hold of the drapery. This prolongation is white and very luminous; it seems to me self-luminous, but I cannot be sure of that. It is straight, very narrow, only about one-sixteenth of an inch in diameter, at its end a mass, not rounded but rather triangular. The external part of this mass is frizzy, or rather its outlines are vague. At first it is quite still, then it moves jerkily, as if the stem was being re-absorbed in the body. It seemed to me that the luminous mass, in shape something like an African native club, changed size, becoming now larger and now smaller. In the end it returned into Marthe's neck and back, her hand remaining in sight the whole time."

Such are the experiments I made with Marthe in 1906. Being corroborated by the subsequent admirable photographs taken by Mme. Bisson and Schrenck-Notzing, they seem to me of the highest importance.

In the first place no trickery was possible. The light was ample for perfect visibility; the proximity very close indeed; the time often very long, enabling me to observe closely every detail. These conditions entirely preclude fraud. Even if, for the sake of argument, we adopt the absurd supposition that Mme. de S., in whose house the experiments took place, was an accomplice, it would have been impossible to generate under my eyes these clouds which developed into bony and mobile masses just in front of me.

Marthe was examined and searched before and after the experiments. I never lost sight of her for a moment and her hands were always held and visible.

The phenomena were therefore authentic.

The outcome of these surprising observations is that we can state the stages in the formation of ectoplasms—a whitish steam, perhaps luminous, taking the shape of gauze or muslin, in which there develops a hand or an arm that gradually gains consistency. This ectoplasm makes *personal* movements. It creeps, rises from the ground, and puts forth tentacles like an amœba. It is not always connected with the body of the medium but usually emanates from her, and is connected with her.

Two phases can be distinguished: a rudimentary phase, a sort of rough draft, and a phase of building up. With other mediums

the organized form may probably appear immediately without being preceded by the indistinct cloudy phase.

To confirm the authenticity of the phenomena, I cannot do better than reproduce side by side the notes taken by me in 1906 and those published by Geley in 1920. I have changed nothing in

C. Richet's Notes (1906).

On the ground a small white tract which grows, makes an ovoid mass, and puts forth a prolongation. This mounts on the arm of the chair. At this moment there are visible two horns like those of a snail which seem to direct the movements. A lower mass, X, on the ground; and an upper mass, B, united to the former, which has climbed over the arm of the chair. I can look at this formation from a very short distance. The stem is greyish white, with swellings like an empty snake-skin. The mass X is on Marthe's knees, while the mass B spreads itself on the floor like an amœba. The mass X is greyish, gelatinous, and barely visible. It is then on Marthe's knees. Little by little it seems to split into digits at its end. It is like the embryo of a hand, ill-formed but clear enough to enable me to say that it is a left hand seen from the back. Fresh progress: the little finger separates almost completely: then the following changes, very quick but very clear: a hand with closed fingers, seen from the back, with a little finger extended, an ill-formed thumb, and higher up a swelling that resembles the carpal bones. I think I see the creases in the skin.

Geley's Notes. "From the Unconscious to the Conscious," 1919.

"From the mouth of Eva there descends to her knees a cord of white substance of the thickness of two fingers; this ribbon takes under our eyes varying forms, that of a large perforated membrane, with swellings and vacant spaces; it gathers itself together, retracts, swells, and narrows again. Here and there from the mass appear temporary protrusions, and these for a few seconds assume the form of fingers, the outline of hands, and then re-enter the mass. Finally the cord retracts on itself, lengthens to the knees, its end rises, detaches itself from the medium and moves towards me. I then see the extremity thicken like a swelling, and this terminal swelling expands into a perfectly modelled hand. I touch it; it gives a normal sensation; I feel the bones, and the fingers with their nails. Then the hand contracts, diminishes, and disappears in the end of the cord." (Page 57, English translation.)

either. We experimented quite separately with Marthe, I in 1906 and Geley in 1910. We did not communicate our notes to each

other nor publish anything. They are therefore quite independent results.

It is impossible to suppose that Geley (whom I hardly knew in 1910) and myself were similarly hallucinated five years apart by the same illusion.

Geley, after describing very precisely the variations in the gelatinous embryo-plastic mass, adds, "I do not say merely 'There was no trickery.' I say, 'There was no possibility of trickery. Nearly all the materializations took place under my own eyes, and I have observed the whole of their genesis and development.'"

I can say exactly the same.

Other observations similar to those on Marthe-Eva are mentioned by Schrenck in his fine work. These were with a young Polish girl, Stanislawa P., who chanced to discover her mediumistic powers by suddenly seeing (when eighteen years old) the apparition of her friend Sophie, who, unknown to her, had just died.

At Schrenck's house in Munich Stainslawa produced ectoplasm from her mouth, like Eva. She had been searched, dressed in black tights, and her head covered with a veil of very fine mesh. The ectoplasm emerged through the veil and formed three fingers. Cinematograph photographs of these experiments were taken.

With Linda Gazzera many instances of telekinesis and ectoplasmic forms have been observed. My learned and generous friend, Dr. E. Imoda of Turin, has published a valuable book narrating his interesting and methodical experiments, made at Turin in the house of the Marquise de Ruspoli.

Linda is a young girl of twenty-two, pleasant, well-educated, lively, and gay. Her guide is a certain Vincenzo, who, it seems, had been a cavalry officer, who died some years back, and concerning whom I have no precise particulars. Sometimes it was Carlotta, a child who died at the age of four. For all the experiments Linda was carefully searched, undressed, and re-clothed, and the cabinet where she sat was minutely searched. Her hands were always held, and she made no attempts to free them.

The only omission in the experiments was that her feet and knees were not as closely controlled as her hands. But it is impossible that the phenomena observed should have been due to movements of the feet, however skilful; such as winding up a musical box, and putting a pipe in my mouth (!!).

Linda's mediumship is characterized by very rapid production

of the phenomena. The light is hardly extinguished when objects are displaced, musical instruments are played, and various white forms appear. At the same time the sitters feel touches of a warm, moist, mobile, living member, though it cannot always be identified as a hand.

Imoda was mainly concerned to photograph the ectoplasms; this is quite laudable, but perhaps the desire to concentrate on getting good photographs prevents minute observations by the naked eye.

Imoda's photographs show very different faces always surrounded by a white veil. When Linda visited me at Paris, G. de Fontenay took some excellent photographs (pp. 175-179)—a hand and a face, the latter seeming to be that of the face of a "possessed" man in one of Rubens's pictures in the Louvre.

As in Schrenck-Notzing's photographs, those taken by De Fontenay are flat, wanting in relief. The hands look more like gloves than real hands.[1]

The photographs taken by Caranzini are similar, the faces are just like dolls' faces and they and the hands are always veiled.[2]

It cannot be supposed that Linda, unable to use her hands, and after being carefully searched and re-dressed, could manipulate cards, dolls, and drawings quickly and skilfully enough to risk being photographed: and more than once she was searched again as soon as a photograph had been taken, and nothing was found. How could she hide an extraneous object?

In my preface to Imoda's book I said: "The fact that the ectoplasms are not living faces is no objection; for there is nothing to prevent the ectoplasm being an image and not a living being. The materialization of a plaster bust is not easier to understand than that of a lithographic drawing; and the formation of an image is not less extraordinary than that of a living human head."

Another evidential and, to my thinking, decisive experiment took place at my house in Paris. There were present M. de Fontenay and myself, also Mme. C. Richet and Argentina (the Italian nurse of one of my small children), whom I had desired to be present so that Linda might have one of her own countrywomen

[1] *Fotografie di fantasmi,* 8vo, Torino, F. Bocca, 1912, preface by Charles Richet.

[2] *A. S. P.,* 1912, xii, 135.

near her. I was on her right, and De Fontenay on her left. The séance lasted only thirty-five minutes.

During the whole time I kept firm hold of Linda's right hand without any intermission, and some thirty or forty times I satisfied myself by touch that De Fontenay was firmly holding her left hand.

Even before Linda went into trance there were movements of objects—the musical box started, and in complete darkness, a pipe placed behind Linda was placed in my mouth. A little later still in total darkness this pipe was seized and forcibly thrown into the middle of the room. Some heavy object dealt strong blows on the back of my hand; some large object struck heavy blows on the table; it also struck De Fontenay. A photograph was taken on which a well-materialized hand appears, the nails and all the fingers being visible. Round it there is a ribbon or some kind of stuff. A thin thread connects it with Linda's head (see p. 434).

This experiment, together with very many more by E. Imoda and the Marquise de Ruspoli, place the reality of the phenomena beyond doubt.

Dr. Paul Gibier, an eminent physiologist and a director of the Pasteur Institute in New York, had a decisive experience with Mrs. Salmon (*loc. cit.*, p. 1733, April 21, 1909).

He experimented in his own laboratory, using an iron cage specially made to his instructions, with a door closing by a lock. Mrs. Salmon was placed in the cage, the door locked, and stamp paper gummed over the lock. He put the key in his pocket. A very short time after the lights had been extinguished, hands, arms, and living forms came out of the cage—a man, a woman, and more often a gay, lively little girl. Suddenly Mrs. Salmon emerged from the cage and fell half fainting on the floor. The seals were found intact and the door had not been opened.

In a second experiment, still more demonstrative, the cage was replaced by a wooden cabinet, specially constructed and hermetically closed. Mrs. Salmon was tied firmly by ribbon round her neck sealed to the walls of the cabinet. The lights were scarcely extinguished before a bare fore-arm and hand appeared outside the cabinet, just twenty-four seconds after darkness was made. Then another form moved outside.

After a few minutes of waiting, a white object about the size of an egg appeared and grew in height. (This mode of development of the ectoplasm should be compared with what was seen

at the Villa Carmen.) Then a woman, seemingly alive, came out of the cabinet and was recognized by Mme. D. and Mme. B. This phantasmal personage spoke French very well (Mrs. Salmon can only speak a few words of French, but this difference signifies nothing). The apparition remained for about two minutes, and P. Gibier could distinguish the features. She was slight in build, seemed about twenty-five, though Mrs. Salmon is corpulent and aged about fifty. Little Mandy came later, about a yard in height. Then a tall man whose muscular, vigorous, and completely masculine hand P. Gibier was able to clasp. After a short time this last form dissolved and seemed to sink into the ground.[1]

After this stirring séance, everything was found intact. Mrs. Salmon was still bound; the silk ribbon round her neck just as placed prior to the séance.

Several facts of great importance stand out from these notable experiences. In the first place they were conducted by a scientific man permeated by an enlightened scepticism, and were managed so that even if we do not admit the honesty of Mrs. Salmon, fraud would have been possible only by the introduction of several accomplices, a supposition that is manifestly absurd. Secondly the rapidity and multiplicity of the materializations would have to be accounted for.

Thus Dr. Gibier's experiments strikingly confirm the other materializations of which details have already been given. What more is required to produce conviction?

There is an extensive bibliography dealing with the experiments of Baron L. von Erhardt and the S. P. R. of Rome with the medium Carancini.[2] This medium was studied not at Rome only, but at Paris by De Vesme, Lemerle, M. Mangin, and at Geneva by Claparède, Flournoy, and Batelli. There are several doubtful points, not as to his mediumship, which seems tolerably definitely proven, but as to his frauds (sometimes even conscious in despite of minute precautions), which detract from experiments that were apparently genuinely successful. Many photographs were

[1]These details were to have been read at the International Congress of Psychology held at Paris in 1900; but Dr. Gibier's premature accidental death intervened. This paper is therefore posthumous, and is entitled *Recherches sur les matérialisations de fantômes, la pénétration de la matière et autres phénomènes psychiques* (*A. S. P.*, xi, 3-16, 65-92).

[2]See especially Erhardt, *Etude sur la médiumnité de Carancini, A. S. P.*, April, 1912, and *Luce e Ombra*, 1908-1913, *A. S. P.*, 1911-1913, *passim.*

taken, but the flash was made only when Carancini gave the word —*Fuoco.*

Carancini was very tightly bound, and was found at the end of the séances tied exactly as at their commencement, but many conjurers seem to find it easy to do this trick.

The phenomena of telekinesis came about very soon after he had been tied. Materializations were few; but one photograph shows a hand which seems flat, as if cut out of paper. The most remarkable experience was one in which a dinner-plate covered with soot (from a smoky flame) out of the medium's reach, was placed in a padlocked wooden box held in the hand of one of the sitters. (Did he hold it in his hand during the whole time?)

Carancini showed levitations and movements of objects, but always in darkness.

In short, the authenticity of the phenomena is not yet certain. After careful perusal of the notes taken, I am inclined to think the results genuine, but only because they resemble the unquestionably authentic observations on Eusapia, for in themselves those on Carancini are to be taken with reserve. To be accurate, there were never any proofs of fraud, but only suspicions, and as M. Erhardt remarks, the hypothesis of fraud implies that the experimenters were absolute imbeciles.

Dr. Feijao, a professor of surgery in the Lisbon Faculty of Medicine, assisted at a number of séances, which have been described by Mme. Frondoni-Lacombe.[1]

The medium was a non-professional one, Mme. d'Andrade. Dr. Feijao thus expresses himself (and the opinion of an eminent and previously sceptical professor has great weight): "Formerly I believed nothing of these things. Now I have seen and observed, and I repent my incredulity."

In these experiments which were made in his own house, all the sitters joined hands: the table rose six inches from the ground, and there were lights, touches, and movements of objects.

Two very striking phenomena are stated by Dr. Feijao: first an *apport,* or rather, a *transport.* The door being locked, a rose from a bouquet in the room was taken into the adjoining room. But this must be taken with reserve, for the professor does not seem to have verified that the rose taken was actually from the

[1] *Une série de séances de matérialisations à Lisbonne, A. S. P.,* December, 1918 and 1919, xxix, 5-12, 26-29. Oliveira Feijao, *Lettre à M. Camille Flammarion, loc. cit.,* pp. 27-29.

bouquet. Even after his affirmation, I must agree with Sir Oliver Lodge that no case of *apport* can be considered fully proved.

The other phenomenon was the apparition of a phantom. All the doors were shut, a photograph was taken, and the plate showed a French (?) officer. It was then ascertained, through the table, that this figure purported to be that of a Lieutenant Catherin, killed at Vitry-le-François, September 27, 1914. The photograph, when shown to the widow of Lieutenant Catherin, did not resemble her deceased husband, and the uniform does not agree with that worn by French officers.

What gives importance to the experiment is not the photograph, in taking which sufficient precautions were not observed, but the sight of a phantom in a locked room before persons who were certainly incapable of a skilful, conscious, and prearranged fraud that would have necessitated the presence of an accomplice.

These observations of telekinesis and ectoplasms are described in a book by Mme. Madeleine Frondoni-Lacombe of Lisbon. I have the honour of knowing Mme. Lacombe, and hold her incapable of fraud. What object would there be in a fraud carried on for five years against all hostile criticism, and resulting only in sarcasms and abuse? The facts narrated are supported by numerous attestations, notably those of Dr. Feijao, at first sceptical but overcome by the evidence of other doctors, Dr. Souza Conto and another, by Captain d'Abren of the Engineers, Captain Silva Pinto, and other distinguished persons in Lisbon.

The medium who gave these remarkable metapsychic results is not a professional medium; she is the Countess Castelvitch, who gave these séances unknown to her husband.

Her mediumship was discovered as follows: "On January 10, 1913," says Mme. Lacombe, "when visiting my friend Countess Castelvitch I proposed table-turning. There were three of us—the countess, Mme. Ponsa, and myself. These ladies had never tried before. . . . That day the table rose up, and a person

Abstract of Note to the Second French Edition. Mme. Lacombe has sent me a letter referring to my previous remarks on her book. She points out that the séances lasted only half an hour and that all precautions were observed that all the sitters (three or four at most) should hold hands. A very incredulous Portuguese journalist (M. Rocha, jr.) was convinced and wrote an article entitled *The Initiation of a Sceptic.* She insists strongly on the authenticity of the *apports,* which she says were frequent and undeniable. Even after her letter I cannot consider the passage of matter through matter as being demonstrated; though it is possible that my opinion may be modified by fresh experiments.

calling himself Lemos manifested by rapping." From that day forward Mme. Lacombe and the countess made many trials and finally obtained a series of extraordinary phenomena that I cannot give here in detail, for it would be necessary to quote the whole volume, which I commend to the reader.

I will only summarize the principal facts, especially those that were observed in presence of Dr. Feijao.

Touches were very frequent and sitters felt hands touching them though the "chain" was unbroken: a heavy table weighing one hundred and sixty pounds was raised on two legs when barely touched: the movements of a small table were so violent that it became necessary to replace it by one strengthened with sheet-iron: when this second table was used it was rent into two hundred (the exact number) small pieces which were piled telekinetically, i.e., without anyone touching them, in a corner of the room. Dr. Feijao thought at first that there must be secret doors to the room by which some person had entered and done this. In other séances a chair weighing thirty pounds moved by itself about four yards. Strong blows were struck rhythmically at different places in the room.

Dr. Feijao writes: "Blows were struck, the loudest being on the glass of the bookcase. Articles of furniture sometimes moved. Heavy chairs moved about the room; efforts were made on the locked doors of the bookcase, which were opened; large and heavy books were flung on the floor (our hands being linked all the time); an office-bell and a handbell, the half-open piano, and a guitar in its case all sounded loudly . . . the table rose as much as twenty-four inches . . . At our request, and when we had all removed our hands, the table still moved."

There were also, as Dr. Feijao thinks, and Mme. Lacombe affirms she has often seen, transport of objects through closed doors: "In one séance we desired that a rose should be taken into the adjoining room. We found this flower under a table, though all the doors were locked as usual."

Despite these attestations, reserve must be maintained regarding this latter phenomenon, which lends itself to illusion, not only by reason of the unconsciousness of the medium but perhaps of some of the sitters also. It is possible that the Countess Castelvitch or Mme. Lacombe may more or less unconsciously effect these displacements. A rigorous and authentic verification is required of the statement that, the doors being absolutely closed, a rose has

passed through them and been conveyed into another closed room.

I make these reservations because these cases are quite exceptional in metapsychic science, if indeed they have ever been verified. But telekinesis is evident especially in the séance of April 24, 1917, at which Dr. Feijao was present and also one of his students, M. Bianco, who was entirely sceptical. The hands of all present were fastened together so that they could not be detached: and under these conditions blows were struck everywhere, a hand was felt by several persons; one string of the guitar sounded loudly, the bookcase was opened, and a book on a distant table was thrown about. Cases of telekinesis in Mme. Lacombe's book are too many for quotation.

It will suffice to cite the following, inasmuch as it took place in full light. A table weighing one hundred and sixty pounds rose on two legs and struck a blow when the countess was a yard distant from it and standing up.

There were some ectoplasms: a phantom representing a French officer, but wearing a uniform quite out of date, was photographed; but the story is too long to be given here. Another time there was a nun; very often there were whitish lights more or less shapeless; another time, a phantom with a death's-head; yet another time, an Arab soldier. All these were photographed.

As all the cases of ectoplasm cannot be quoted I select the following. On December 18, 1914, Countess Castelvitch, Mme. Ponsa, Mme. Furtado, M. and Mme. Lacombe were present in the house of the Countess Castelvitch. Through the table Mme. Furtado's husband was alleged to be present, but that he would not allow himself to be photographed *because he had forgotten what his face was like,* but he said that his companion would come in his place. This companion was his mistress, he having been separated from his wife; and in fact a veiled woman was photographed, causing great fear in Mme. Furtado, who declared she would never be present at any more séances. At the next séance (December 27, 1914), M. Furtado announced his presence again and said, "I have no face, but I will make one," and the phantom photographed is a tall person clothed in white, but the face is that of a death's-head (Fig. 24).

It is difficult or impossible to imagine that these are frauds or illusions. Fraud was not easy. In order to show a French officer, a nun, a phantom with a death's-head, and an Arab soldier

a whole series of costumes would be needed, to be bought at a shop and to be used at the séances where hands were held, if not rigorously, yet sufficiently well. And why should this be done? If Mme. Lacombe wished to deceive she might have given stranger things. There is no reason to suspect the good faith of Mme.

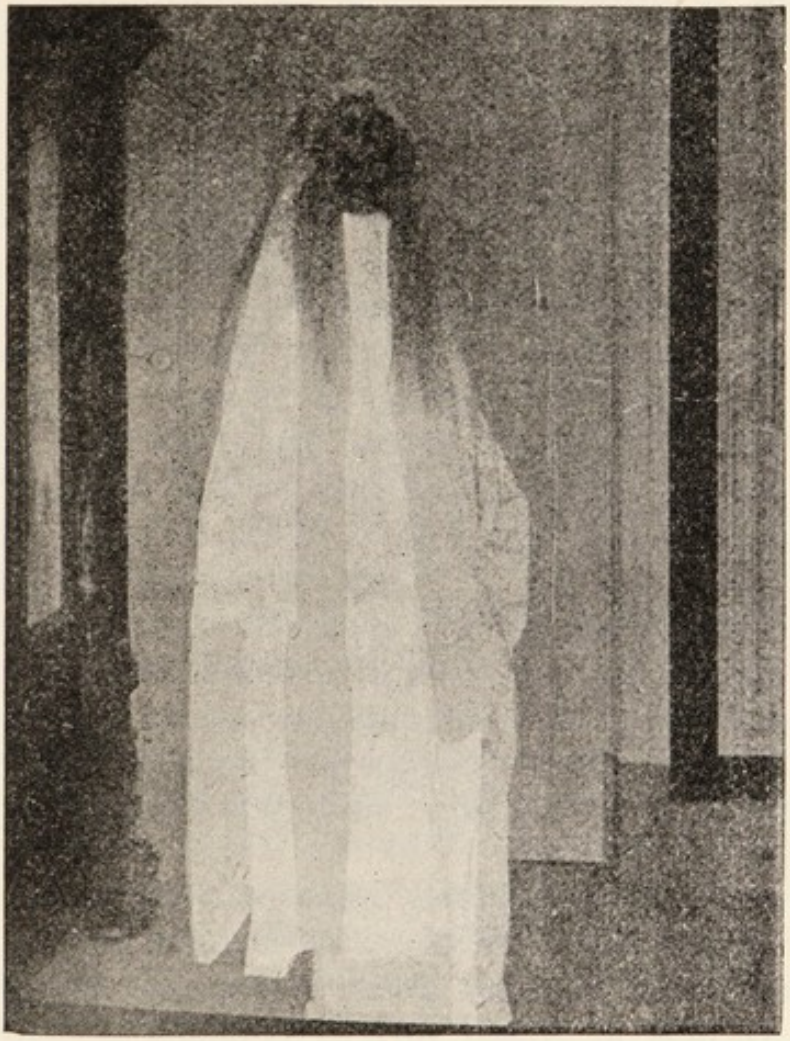


Fig. 24. — Materialization of M. Furtado, with a death's-head (after Mme. Frondoni-Lacombe).

Furtado, who was very sceptical, nor of Mme. Ponsa, who was Mme. Lacombe's intimate friend.

Although it is probable that Countess Castelvitch was the principal medium, Madeleine Frondoni-Lacombe also had remarkable phenomena in full light when alone with her friend, Mme. d'Andrade (p. 208), who also had some manifestations that seem genuine. Holding both of Mme. d'Andrade's hands, Mme. Lacombe saw in full sunlight a parasol rise up, lower itself, and ad-

vance, rolling round with a waving motion. Raps were made at a distance at request. It is therefore permissible to think that Mme. Lacombe also is a medium.

I infer that the ectoplasms observed by her are genuine. If they stood alone in metapsychic science they would certainly not suffice to produce conviction, for Madeleine Lacombe has not the scientific standing to warrant our basing our conclusions on hers; but all that she has seen agrees too well with all we have learned from the experiments with Home, Eusapia, Marthe Béraud, Stanislawa, and Miss Goligher for the Lisbon experiments to be rejected. Though there may be exaggerations and inexactitudes here and there, the facts can be taken as true in the main. Countess Castelvitch was a very powerful medium; it is to be regretted that she should not have been studied under conditions rather more stringent than those imposed by her friend, Mme. Lacombe.

These experiments are probably at an end. After a séance on July 14, 1920, in which an *apport* (an owl's head sculptured in stone) is alleged (a phenomenon that must be strongly contested), a séance was held on August 3d at which the spirit declared that he was about to leave . . . *Hoja ultimo dia que posso manifestar me* (today is the last day on which I can manifest). In the same way Katie King took leave of Crookes, we do not know why.

There were also some subjective phenomena, to which I do not refer, as they are poor in comparison with the cryptesthesia already described, and the Lisbon séances are mainly objective.

In the house of M. Corralès, an honourable merchant of San José, Costa Rica, some seemingly fine materializations took place. His daughter Ofélia claimed great mediumistic powers. Several séances were held at which various notables of San José were present. Various materializations appeared (Don Constantino and Mary Brown, who spoke very correct English).

Ofélia was seen sometimes in full light at the same time as Mary Brown who was touched, heard, and photographed (*A. S. P.*, 1910, xx, 324). The phantom Mary seemed to merge into Ofélia from whom she emanated, and to inspire her.

All this reads very well, but despite the imposing list of persons who attest the genuineness of the phenomena, all scientific value must be denied to these experiences. M. Corralès, Ofélia's father, says in so many words: "It is proved that Mary introduced an unknown girl into the room." This enigmatical statement leaves

open all kinds of possibilities. It would be an injury to science to give any place at all to these fraudulent experiences.[1]

Experiments made with Lucia Sordi, which at first satisfied M. Marzorati, did not stand Schrenck-Notzing's severer test. Lucia was enclosed in a wooden cage, and (in the dark) when in trance, she emerged from it, but Schrenck had a wooden ball made of the same size as her head and showed that it could easily be pushed between the bars by bending them (*Luce e Ombra*, x, November, 1910, and *A. S. P.*, xxi, January, 1911, 225-230).[2]

Colonel and Mme. Peters at the Lodge Psyché in Berlin saw a striking materialized form. The séance took place in a small room sufficiently lit by a red light. The medium (a masked woman) was asleep in a chair. First a masculine figure, whose body was not visible below the knees, appeared beside her; then another form, the so-called nun Cordula, taller by a head than the medium, wearing the Dominician habit. Her face was entirely human, with shining eyes. She swayed in the air, floated high in the room for three minutes at a height of nearly three yards, making gestures and saying, "Look how my eyes shine!" She then vanished by degrees, the medium being all the time in the same place about a yard and a half from the apparition (*A. S. P.*, 1907, xxvii, 25-35).

Eglinton was a very powerful medium, and though he has been suspected of fraud, he was able finally to prove that the allegations of his enemies were calumnies. Moreover, the question is not to establish that he was never guilty of trickery (which is not easy in the case of a professional medium) but whether in certain definite instances striking metapyschic phenomena have been produced (Erny, *loc. cit.*, 159).

[1]Mr. Willy Reichel (*Psychische Studien*, October, 1910, and *A. S. P.*, 1911, xxi, 140) considers these as manifest frauds. C. de Vesme has defended them. But things being as they are, no account should be taken of these alleged phenomena even by the best natured persons (*A. S. P.*, 1911, xxi, 214).

[2]The authoritativeness of séances that give materializations should always be compared with those at which Eusapia's phenomena were observed. For twenty years, at Milan, Genoa, Rome, Naples, Turin, Paris, Ribaud Island, Carqueiranne, l'Agnelas, Cambridge, Montfort-l'Amaury, and Washington, Eusapia was scrutinized, analyzed, and thoroughly studied by such men of science as Schiaparelli, Oliver Lodge, Lombroso, Myers, Aksakoff, De Rochas, A. de Gramont, P. Curie, Morselli, Bozzano, Ochorowicz, Foa, Bottazzi, Vassallo, Feilding, Carrington, Maxwell, Dariex, and others. It will probably be long before an equally imposing list of unexceptionable witnesses can be produced in any other case.

Miss Glyn, who did not believe in materializations, saw Eglinton at her own house, at a séance at which her father, her brother, and a friend were present. Eglinton was in the middle of this little circle, and his hands were held. Two forms appeared that could move and speak. Miss Glyn recognized them for her mother and her younger brother. The forms slowly disappeared. Phantoms are often too readily recognized, and the desire to secure this recognition detracts much from the value of the attestation.

Dr. Carter Blake, with five persons well known in English intellectual society, narrates that he saw by the side of Eglinton, who was sitting in an armchair, a tall brown form that melted into the medium's body.

The distinguished naturalist, Alfred Russel Wallace, in a letter to Erny, states that he saw Eglinton at a séance in a private house. By his side there appeared Abdullah, a materialized Oriental wearing sandals, a turban, and burnous; Eglinton being visible at the same time sitting in an armchair in evening dress. After the séance Eglinton was undressed and most carefully searched but neither sandals, turban, nor burnous were found.

Important séances were held at the house of the artist, J. Tissot, who has represented one result in a very beautiful picture. Eglinton sat in an armchair, close to Tissot, and stayed there the whole time. The doors were locked. After a brief space two forms appeared by Tissot's side. At first they were nebulous, but gradually became clear so that all their features could be seen. The male form had in his hand a kind of light with which he lit up the feminine form. M. Tissot recognized the latter, and, much moved, asked her to kiss him; she did so several times and her lips were seen to move.

Dr. Nichols experimented with Eglinton, putting him in a cage with a net over it. The doors of the cage were closed with sealed knots and the approaches to the cage were dusted with flour. The forms appeared outside the cage. Another time, at Dr. Nichols's house, in daylight, but behind closed curtains, there was a materialization in human form, which, in order to be recognized, raised the curtain to show itself in the daylight. It then slowly dematerialized till there remained nothing but the lower part of the body which vanished abruptly.

Florence Marryat and her husband assisted at a remarkable private séance in which they saw a whitish, cloudy substance

emerge from the left hip of the medium; this cloud increased in size, condensed, and became a materialized form that stood before Eglinton. She also studied the materializations given by Mr. Arthur Coleman who was not a professional medium. He was tied with cotton threads that would break at the least movement. Before the five sitters six forms appeared and were seen by the light of a gas-burner. During this time Coleman was entranced in the next room.

Mr. Stainton Moses often saw living forms about him. His friend, Mr. Charlton Speer, reports, among many other facts, as follows: "I had my hand on the paper, writing, when Mr. Moses, sitting just opposite me, said, 'There is a column of light in front of you.' Shortly after he said that the column had grown into a spirit, whose head and shape he described." It is very doubtful if this figure was objective; apparently it was seen by Stainton Moses only.

Heavy blows were heard in full daylight by Mr. Speer and Stainton Moses out of doors on the rails of the line to Southend. These knocks (which were intelligent) could be heard fifty yards away. Mr. Moses notes also vague, luminous forms near the table and simultaneous knockings. Reference has already been made to telekinesis in his presence, but materializations were exceptional.

In 1905 the Rev. Mr. Colley, archdeacon of Canterbury, made some astonishing experiments with the Rev. Monck, the medium studied by Reiners and Oxley, quoted by Delanne (p. 521). The gas-jet was fully lit and Colley was at the side of the entranced medium, holding him up. A vapour emerged from the medium's black clothes, and became a cloud which gradually condensed into white draperies surrounding the apparitions. A child appeared who moved in the room just like a living child, and was kissed by those present, then returned to the medium and *was gradually absorbed by him and disappeared, melting into his body.* On the same day a beautiful woman appeared, born from a fluidic filament emanating from Monck and re-absorbed by him. In another séance an Oriental form calling itself the Mahdi was seen two yards distant from Monck: "The Mahdi wore a metallic helmet that I could touch; it seemed to melt like snow at my touch, resuming its form a moment later." This phantom was strong: Mr. Colley one day seized it in his arms, and then, "an irresistible force flung me about six yards to the place where the medium was standing; and I found myself clasping the medium, with white

muslin over his black coat. I was holding him in my arms as I had thought to hold the Mahdi."

This statement led to the supposition that Mr. Colley was the victim of a fraud; but he had seen the vapour becoming a cloud and materializing into garments covering a body.

One materialized form called itself *Samuel,* and the medium was seen to clasp Samuel's hand fraternally and walk with him round the room. The archdeacon wrote: "I publish these things for the first time, having meditated over them in silence for twenty-eight years, giving my word as a clergyman for things which imperil my ecclesiastical position and my future advancement."

There was a celebrated lawsuit on this. The conjurer Maskelyne undertook to repeat the phenomena by trick. He wagered £1,000 and lost his suit. The illustrious A. R. Wallace gave evidence in support of Mr. Colley.

Dr. Hirschmann, President of the Anthropological Society of Liverpool, obtained most interesting results with a non-professional medium, Mr. B. Many photographs were taken of apparitions, their height was measured, their weight taken, and their pulse observed, just as if they were living bodies. These apparitions, he says, seemed to organize themselves from a nebulous mass, and they disappeared suddenly. In one photograph a nebulous connection is seen between the chest of the medium and that of the phantom.

At the house of Professor E., of Christiania, in 1893, M. de Bergen arranged a series or séances with Mme. d'Espérance, in which many distinguished persons belonging to the university, the magistrature, and the clergy took part.

In one of these séances an extremely beautiful female form appeared calling herself Nepenthes. "She showed herself in the light at the same time as the medium, who was sitting with other persons outside the cabinet, and materialized in the midst of the circle. She plunged her hand into liquid paraffin wax, leaving a mould of rare beauty. The modeller who made the plaster cast could not believe his eyes and spoke of sorcery, because he could not imagine how the hand could have been extricated from the wax glove.

"Nepenthes dematerialized in the midst of the circle. She lowered her head on which her usual diadem shone, and little by little became a luminous cloud like a human head (on which the diadem still faintly showed) gradually fading away."

Professor Aksakoff published a memorandum of Mme. d'Espérance[1] to which it would seem too much importance has been ascribed.

Mr. Carrington has shown that if there was no fraud, fraud was quite possible. Professor Aksakoff very loyally gives the evidence of several persons present at this alleged dematerialization who did not accept it as genuine, for example, the engineer, Schonelz (p. 92). The honesty of Mme. d'Espérance may very well be admitted while supposing that by an unconscious backward movement of her legs she may have given rise to the notion or may have herself thought that her lower limbs were dematerialized for a time.

A medium named Sambor, a former telegraphist, gave a series of séances from 1896 to 1902, which are recorded in the Russian spiritist journal, *Rebus*. Petrovo Solovovo, a skilful experimentalist and scientifically sceptical, had given an analysis of these séances, especially of those at which he was present. But he has since raised some justifiable doubts even on the latter.[2]

In 1899, in the house of Mme. de A., the materialized form of a little girl appeared between the curtains, Sambor being in the chain formed by the linked hands of the sitters. A white column seemed to rise from the floor and move towards Sambor. This materialized form (Olia) raised a table into the air, and a small (child's) hand touched the sitters. On another occasion, only Mr. S. and Mr. Bonjunski being present, a form, Friedrich, appeared, quite different from Sambor both in stature and gestures; this materialization and Sambor were seen together, walking about the room. The light was good, and all took place in Mr. Bonjunski's small room in Petersburg on June 20, 1899, at which time of year there is practically no night. Among other phenomena, Friedrich wrote something on the inside of the glass of Mr. S.'s watch.

Mr. Erfurt, the director of a printing works at Petersburg, prepared a cone of sheet-iron, with a piece of paper and a pencil inside it. M. Zabasky and M. Eichwald, engineers, closed the cone with an iron cover fixed on with special rivets. This cone was left for several days in a room that Sambor had never entered. In the séance of March 8, 1902, Sambor declared that something had been written; the cone was opened, not without difficulty, and

[1] A. Aksakoff, *Un cas de matérialisation particlle du corps d'un médium. Enquêtes et commentaires,* Paris, Libr. de l'Art indépendant, 1896.

[2] *A. S. P.*, November and December, 1899, ix, 105 and 109, xi, 243-256; 1902, xii, 257-302.

after having verified that everything was intact some words were found written in pencil on the paper.

Mme. Youdenitch has communicated to *A. S. P.* (1904, xiv, 193) details on the séances that took place in the house of M. Olchowski. There was almost complete darkness. Hands were joined, so that the hands of the medium were never free. The little girl Olia appeared at Sambor's side. She could be seen and touched and she was heard to speak. She was luminous and bluish white in colour, and seemed to tremble the whole time. Her features were ill-defined, and she disappeared by degrees, vanishing "like a tremulous ribbon." In an adjoining room, where there was certainly no one, a mandolin had been placed, which began to play of itself. This white mandolin, visible in the faint light, was seen to come from the room where it was and settle on the table in the séance room.

The hypothesis of an accomplice will explain some of these phenomena, but not all. This hypothesis that seems so unlikely at first sight was actually proved. Petrovo Solovovo learned, later, that one of the sitters intentionally released Sambor's hand that he was supposed to be holding. There is therefore nothing to be said on the so-called phenomenon of the chair. But this does not explain the phantom seen by all at Sambor's side; for the complicity seems to have been limited to the release of one hand. All the same, legitimate doubts may be cast upon all Sambor's mediumship, for there is no certainty of his probity nor that of the circle.

It is scarcely worth while to mention the very old experiments by Dale Owen in New York in 1860, and as the phenomena were given by one of the Fox sisters, then Mrs. Underhill, they cannot be trusted. Still, it is probable, as in so many cases with Leah Fox, that there was an admixture of genuine phenomena. Dr. Gray cut off a piece of the garment of the materialized form, which melted little by little in his hands (Erny, *loc. cit.*, 133). This must be accepted as genuine unless Dr. Gray were a low impostor. A New York banker, Mr. Livermore, had about a hundred séances at his own house with Leah Fox and many times recognized his deceased wife whom he ardently desired to see.

At a private séance in Australia, Mr. Brown, experimenting with one of his friends who was a medium, hung a curtain across one corner of his room. The medium retired behind this curtain, and twelve materialized forms appeared in succession among

whom Mr. Brown believed that he recognized two deceased sons of his.

M. Stiegler narrates (*A. S. P.*, 1905, xv, 641) a spiritist séance at Arles directed by J. Bayol, an eminent surgeon of the French Navy, subsequently Governor of Upper Nigeria. The medium was a young employee of the Paris-Lyons Railway. Lights appeared on the ceiling and a greenish-blue ring appeared over the heads of the sitters. Details given are few.

Baron Hillenbach of Vienna had some séances there with Mme. Toeffer at his own house, Dr. Tieber assisting. Mme. Toeffer, sitting on a sofa, was covered by a net nailed to the floor all round. A form appeared which raised the curtain, and while so holding it, Mme. Toeffer could be seen in a state of trance, with her arms hanging down.

Lucy Stout witnessed a materialization in a wooden house in Kansas City (Missouri). She specially observed its dematerialization. The form approached the medium's cabinet, became cloudy and transparent, and was transformed into a luminous mass which finally disappeared.

M. Fremery, at La Haye, in the house of Mme. Huygens, saw a tall white form surmounted by a luminous sphere, the medium being motionless behind the curtains. By degrees this condensed into a hand which rose to the ceiling, holding a palm-branch. The luminous hand then descended to the table. Only the hand and arm were materialized and seemed to be those of a child of fourteen (*A. S. P.*, 1908, xvii, 256).

Another experience was very interesting: "A phosphorescent cloud developed, moving quickly towards us, rose up, condensed, flowed to the ground, and disappeared behind the curtain. Then a luminous arm of abnormal length emerged from the curtain, a luminous disk in a phosphorescent cloud moved quickly towards a chair which was displaced, whilst the medium remained visible to all of us sitting in the cabinet" (*A. S. P.*, 1908, xvii, 309).

An American sculptor, Mr. Brackett, experimenting with Mrs. F., of Boston, thus describes the disappearance of the phantom of his wife: "This form did not resemble her; but told me intimate things that she alone could know. Suddenly the form sank down and disappeared through the floor which was covered with a thick carpet; the head and shoulders remained visible to the last." The similarity to the Villa Carmen phenomena will be noted.

Mr. Brackett saw two materialized forms together with the medium, and verified that they underwent transformation. "I saw a tall young man who called himself the brother of Mrs. X., who was with me, and as Mrs. X. said she could not recognize him (having only known him as a child), the form shrank little by little till it assumed the form of the little boy that Mrs. X. had known." "Sometimes," says Mr. Brackett, "the form dematerialized before me and I at once verified that the medium was sleeping."

These diverse experiments, which have not been repeated, and which are testified to only by certain observers possibly devoid of the necessary scepticism, do not seem to me such as to shake the negative convictions of scientists. But this is not the case with the phenomena recorded of Home, Florence Cook, Eusapia, and Miss Goligher which are unassailable. Those of Marthe-Eva, of Linda Gazzera, Mrs. Salmon, Eglinton, and Mme. Lacombe acquire full value from the others, and this value is considerable; nor do I see reason to dismiss entirely those of M. Corralès, Sambor, and perhaps those of Mme. d'Espérance.

I think I have mentioned all the cases of experimental materialization that seem worthy of notice; but one can never be sure of giving a complete list, and I apologize in advance for any omissions.[1]

Nothing in the history of materializations would give more positive proof than the production of moulds obtained under unexceptionable experimental conditions, from materialized forms dematerializing themselves.

Aksakoff (*A. S. P.*, 1897, vii, 28) cites various cases of moulds obtained by fluidic hands making impressions on flour, plaster, or paraffin wax. According to him the first experiments of this kind go back to 1855 (*Banner of Light,* April 1, 1855, and August 10, 1867).[2]

The facts narrated by Aksakoff did not convince me; even the putty cast of Eusapia's head did not seem to me certain, and I was

[1]I prefer not to allude to the unpublished experiments which were told me at Warsaw or described to me by letter, by persons of good standing. They are so stupefying and hugely improbable that I unfortunately cannot bring myself to believe them. And yet . . .

[2]See also Zöllner and Wagner (*Psychische Studien,* 1877, 401; 1878, 492; 1879, 249); and *Spiritualist,* 1878, 134.

sure that we had nothing really evidential in the way of moulds, when in 1921 we were able to study these phenomena with a Polish medium—Kluski—at the Metapsychic Institute.

Geley and I took the precaution of introducing, unknown to any other person, a small quantity of cholesterin in the bath of melted paraffin wax placed before the medium during the séance. This substance is soluble in paraffin without discolouring it, but on adding sulphuric acid it takes a deep violet-red tint; so that we could be absolutely certain that any moulds obtained should be from the paraffin provided by ourselves. We therefore had certain proof that the moulds obtained could not have been prepared in advance but must have been produced during the séance itself. Absolute certainty was thus secured.

During the séance the medium's hands were held firmly by Geley and myself on the right and on the left, so that he could not liberate either hand. A first mould was obtained of a child's hand, then a second of both hands, right and left; a third time of a child's foot. The creases in the skin and the veins were visible on the plaster casts made from the moulds.

By reason of the narrowness at the wrist these moulds could not be obtained from living hands, for the whole hand would have to be withdrawn through the narrow opening at the wrist. Professional modellers secure their results by threads attached to the hand, which are pulled through the plaster. In the moulds here considered there was nothing of the sort; they were produced by a materialization followed by dematerialization, for this latter was necessary to disengage the hand from the paraffin "glove."

These experiments, which we intend to resume on account of their importance, afford an absolute proof of a materialization followed by dematerialization, for even if the medium had the means to produce the results by a normal process, he could not have made use of them. We defy the most skilful modellers to obtain such moulds without using the plan of two segments separated by thread and afterwards reunited.

We therefore affirm that there was a materialization and dematerialization of an ectoplasmic or fluidic hand, and we think that this is the first time that such rigorous conditions of experiment have been imposed.

There is ample proof that experimental materialization (ectoplasmic) should take definite rank as a scientific fact. Assuredly

we do not understand it. It is very absurd, if a truth can be absurd.

Spiritualists have blamed me for using this word "absurd"; and have not been able to understand that to admit the reality of these phenomena was to me an actual pain; but to ask a physiologist, a physicist, or a chemist to admit that a form that has a circulation of blood, warmth, and muscles, that exhales carbonic acid, has weight, speaks, and thinks, can issue from a human body is to ask of him an intellectual effort that is really painful.

Yes, it is absurd; but no matter—it is true.

Further, materializations must not be considered as isolated phenomena. They must be considered along with telekinesis and collective hallucinations. Taken together they carry indisputable proofs before which the imperfect science of today must bow. The function of science is first of all to verify; and then, if possible, to understand.[1]

[1]At the Copenhagen Congress (*vide Revue Métapsychique,* p. 364) Mme. Bisson read a report of some astounding facts that must be admitted in despite of their wild improbability, because of the known exactitude of Mme. Bisson's experimental methods. The events narrated took place on May 25, 1921, before six persons in full daylight. The ectoplasm, called "the substance" by Mme. Bisson, was transformed into a tiny nude woman, beautifully formed, apparently alive and who moved her limbs. Her size changed rapidly. Eva took her and placed her on the hands of Mme. Bisson where she remained about ten seconds, long enough for those present to verify that she seemed alive. Comment is needless.

I cannot forbear to mention here the observations on Eva made by certain members of the S. P. R. in January, 1922—Messrs. Dingwall, Baggalay, Fournier d'Albe, Woolley, Feilding, and Whately-Smith; Mrs. Salter and Miss Newton.

Elaborate precautions, quite justifiably minute, were taken against the possibility of trickery.

The official reports of the séances lead to very distinct inferences; it seems that though the external conditions were unfavourable to success, some results were very clear and that it is impossible to refer the phenomena to fraud.

Nevertheless our learned colleagues of the S. P. R. come to no conclusion. They admit that the only possible trickery is regurgitation. But what is meant by that? How can masses of mobile substance, organized as hands, faces, and drawings, be made to emerge from the œsophagus or the stomach? No physiologist would admit such power to contract those organs at will in this manner. How, when the medium's hands are tied and held, could papers be unfolded, put away, and made to pass through a veil?

The members of the S. P. R., when they fail to understand, say, "It is difficult to understand how this is produced." Mr. Dingwall, who is an expert in legerdemain, having seen the ectoplasm emerge as a miniature hand, making signs before disappearing, says, "I attach no importance to this." We may be permitted to remark that very great importance attaches to Mr. Dingwall's testimony. The general conclusion is that there was probably no trickery, but the phenomena were not sufficient to warrant acceptance.

Certainly every experimenter has the right to be very exacting as to proof, but it is impossible not to be astonished at the glaring contradiction between the reports of these séances and the inferences drawn from them. However, we willingly concede to the London experimentalists that for such surprising phenomena it is advisable not to rest on past experiments, but to repeat them; there is all to gain and nothing to lose by increased rigour and frequency of experiment.

M. Guy du Bourg de Bozas reports (*Revue Métapsychique*, No. 1, 1921) an interesting variation in ectoplasmic experiments. With three different mediums, in Paris, Copenhagen, and Warsaw, he has found that electric connection could be established between two electrodes. Electrical resistance being easily measured, the new method may be expected to be very useful (second French edition).

There is in Warsaw a professional medium called Burgik. He is a man of about forty-five, thin, undersized, and seems in indifferent health. He gives many séances and seems not to be at all interested in the phenomena, which appear to be quite independent of his will. I had eight to ten séances with him. He is quite motionless during the experiments, and his left hand was held by me, the right being held by some other person. Lights, sometimes very bright, appear and move about like will-o'-the-wisps, close to our faces and moving about the room up to the ceiling.

In the last séance that I had with him the phenomena were very marked. I held his left hand and M. de Gielski his right. He was quite motionless, and none of the experimenters moved at all. My trouser leg was strongly pulled and a strange, ill-defined form that seemed to have paws like those of a dog or small monkey climbed on my knee. I could feel its weight, very light, and something like the muzzle of an animal (?) touched my cheek. It was moist and made a grunting noise like a thirsty dog. Later on two strong hands seized my two shoulders; and very bright lights came round a face. No trickery seems possible, but it must be remembered that we were dealing with a professional medium.

This medium ought not to be left to develop in unscientific, mystical, and credulous circles. All such half-experiments are valueless from a scientific point of view.

Further experiments were made with Kluski, resulting in fresh paraffin moulds which prove conclusively that the "gloves" of paraffin wax were obtained during the séance, that these were of a living hand showing the texture of the skin, the veins, and the creases of the skin, and that a normal hand could not have released itself from the glove.

These were the conclusions of practised moulders, called in as experts, They say, "We cannot understand how these paraffin moulds could have been obtained; it is an absolute mystery to us." This mystery is dematerialization, a correlative of the materialization. The whole of this investigation made by Geley with minute care is of the highest importance, for it gives irrefragable scientific demonstration of ectoplasmic materialization (second French edition).

CHAPTER IV

Levitations

Ectoplasms and telekinesis are proven phenomena, and with these must be linked the still uncertain facts of levitation.

This is an exceptional occurrence, even with powerful mediums. The word is not defined in Littré's dictionary; it is a partial or total raising of the body without any apparent mechanical muscular action, whether the body remains for some time suspended in the air, or whether it merely rises for a moment to a certain height.

Many such levitations are mentioned in the *Lives of the Saints;* and I do not know that this phenomenon, so frequently related in legend, can always be controverted.

Many cases are related in Görre's *Mystique Divine*[1] (transl. Paris, 1894, ii, 291). He cites St. Peter of Alcantara, the admirable Christine, Agnes of Bohemia, Bernard de Courléon, Dalmacius of Gironne, St. Francis of Assisi, and more especially St. Joseph de Copertino. Abbé Ribet also cites numerous cases—St. Paul de la Croix, St. Theresa, St. Philip de Néri, Dominique San Diégo (whose levitation is shown in a picture by Murillo at the Louvre), Salvator de Horta, and others.

More recently, religious books affirm the same of A. H. Fournat (1752-1834), of Claude Dhiere (1757-1820), and of the Curé d'Ars, Jean B. Vianney (1786-1859). Reproductions of pictures representing these will be found in De Rochas's book and *A. S. P.*, 1901, xi, 17-47.

I will allude, and that but briefly, only to the levitations of Joseph of Copertino. It cannot be supposed that all that has been said of him is entirely false; for there is plenty of documentary testimony, and not of remote date, for he was born in 1603 and died in 1663. Fifteen years after his death Father Nuti of Assisi wrote his life, employing the testimony of many witnesses. Three

[1] *La Mystique Divine,* Paris, Poussielgue, 1883; quoted by De Rochas in an admirable little book, wise and erudite: *Recueils de documents relatifs à la lévitation du corps humain,* Paris, Leymarie, 1897.

successive investigations, in 1711, 1722, and 1753, were made by successive popes prior to his beatification, and a life of St. Joseph was published in 1753, only a century and a half ago, and in this book alone the facts are attested by a sufficient number of witnesses.

From all these documents it appears that he was often lifted from the earth, sometimes remaining suspended in the air in presence of all the brothers of his order. The monks round him, doubting what they saw, passed their hands under his feet to be sure that they were not touching the ground. Pope Urban VIII witnessed this levitation, as also Duke Frederic of Brunswick in 1650. It would seem that in some exceptional cases St. Joseph could raise into the air those who had come to see him.

Görres gives no less than twelve pages to these levitations of St. Joseph, and says that each was preceded by a kind of ecstasy which began by a cry, Oh! Oh! repeated several times, and that the holy man was seized with trembling followed by a period of stupor.

In the official report of proceedings "to deliver a girl possessed by the evil spirit" at Louviers in 1591, Françoise Fontaine, a young servant of Louviers, being on her knees, was "fearsomely raised," and another time was raised from the earth higher than the altar. A third time she was raised over a bench in front of the altar and carried through the air, head downwards. The priest Pillet who was exorcising Françoise showed much discernment! He considered that she was raised by her hair, and had her head shaved, which forthwith put an end to the levitations (??)

No account can be taken of this old document, nor of those referring to the possessed persons of Langres (1734). The credulity of exorcists is sometimes unimaginable, and we must assume provisionally that all these formal attestations are only illusions. Therefore though we cannot absolutely deny all these stories, they cannot convince.

A. de Rochas mentions some instances of levitations observed in the nineteenth century by various experimenters who were certainly credulous but also men of good faith—the magnetizer Lafontaine, Dr. Cyriax of Berlin, Mr. B., a friend of De Rochas, a student at the Polytechnic; M. Paluzzi of Naples; Monseigneur d'Hulst; Dr. Schmidt of Vienna; and Justinus Kerner, with the Seeress of Prévorst. He says with justice, "The history of science is there to remind us that each generation has seen crumble down

the greater part of the scaffolding of knowledge of which the previous generation was assured."

Although levitations cannot be placed among demonstrated facts, they certainly merit attentive examination. In fact, levitation is only a special case of telekinesis—an unknown mechanical action on matter. Only if it is mechanical, the fulcrum of the power is not apparent.

Semi-levitations must be distinguished from total levitations. In the former the body of the medium loses weight, or, almost without muscular help, it is placed on a table. It is difficult to verify the conditions, especially if the phenomenon takes place in the dark: in that case even testimony proves little; for a medium, even if not acrobatic, could quite well persuade credulous sitters that it had taken place by supernatural powers. There is no need to make much of such semi-levitations as were given by Carancini.

According to Kerner, when the Seeress of Prévorst was put into a bath during her trances she floated on the top of the water like a cork. It is a pity that such stuff should be mingled with serious enquiries; they detract from them.

Eglinton at a memorable séance in presence of the Emperor and Empress of Russia, the Grand Duke of Oldenburg, the Grand Duke Vladimir, and other members of the Imperial family, rose into the air. "My neighbours," says Eglinton, "had to stand on their chairs to follow me. I continued to rise till my feet touched two shoulders on which I leaned; they were those of the Czar."

Florence Cook relates that when fourteen years old she was raised up to the ceiling, to her great alarm. This was at one of her first spiritualist séances. She was carried above the heads of the sitters and deposited on a table.

Abbé Petit, writing to De Rochas, said that he was once lifted in a church; he resisted and his terror was such that he was ill afterwards. But he brings forward no witness, so the thing was doubtless an illusion.

Dr. Nicolas Santangelo, of Venosa, on giving his hand to two mediums, Ruggieri and Cecchini, was lifted into the air by Ruggieri. "Feeling the ground fail under my feet, I clung to the arm of Ruggieri, and was raised to a height of about three yards; so that I distinctly felt the chandelier with my feet. On descending, and light being restored, I found myself kneeling on the table."

All these stories are highly doubtful. Some others, here following, seem to deserve more credence.

Dr. L. Luciani, professor of physiology in the University of Rome, relates that at a séance with Eusapia, he holding one hand, and M. E. Nathan, Mayor of Rome, holding the other, she said that she was rising into the air. "We felt a movement of ascent that we followed without aiding it. Light was restored and Eusapia was sitting in her chair, both of its front feet being on the table" (*A. S. P.*, 1906, xvi, 653).

Dr. L. Patrizi, also a professor of physiology, studied the levitations of the medium, A. Zuccarino, and gave some interesting photographs (*A. S. P.*, 1907, xvii, 528-549). Zuccarino is a young man of about twenty-two, a government employee, and therefore not a professional medium. The phenomenon peculiar to him is a very distinct levitation that lasts for about ten seconds. He holds the hands of the sitters who link hands round him, but in place of leaning on their hands he tends to take them higher. During the trance necessary for levitation he claims to be helped by his guides. He produces also some luminous phenomena.

Despite the authority of Professors Luciani and Patrizi, the levitations of Eusapia and Zuccarino have been questioned; but I am not prepared decidedly to deny what two distinguished physiologists attest.

Stainton Moses had levitations, which he describes as follows: "On August 30, 1872, I felt my chair twist round from the table to be raised from the floor to a height that I estimate as twelve to fourteen inches. My feet were about twelve inches from the floor. The chair remained suspended for a few moments and I then felt myself lifted higher and higher by a slow, steady movement. I felt no fear or uneasiness. I was perfectly conscious of what was happening and described the phenomena to those who were seated round the table. The movement lasted a considerable time. I was facing the wall and marked it at the level of my chest with a pencil. This mark was about six feet above the floor. I was not troubled, I seemed to be in a lift and the things round me to be lowered below me." [1]

Stainton Moses describes other particulars as to his levitations. Sometimes he was transported from his chair to a sofa at a considerable distance, and very quickly. Once he was raised so high that his feet touched the head of one of the sitters, he then being in a recumbent posture. On that day, after the levitation, a stool

[1] *Researches on spiritualism during the years* 1872-3, by M. A. Oxon (pseudonym of Stainton Moses) cited by Fr. Myers, *P. S. P. R.*, xi, 1894, 261.

was taken from one corner of the room and knocked against a chair near the door.

But Stainton Moses disliked physical phenomena; why, is not very clear ("I discouraged them as much as possible, from a dislike to violent physical manifestations"), so that they occurred no more.

Eusapia showed only partial levitations. Morselli says, *"Rarissimo fenomeno, certamente sincero nel suo inizio, forse illusorio per nostra nella sua continuazione aerea al di sopra del tavolo mediumnico."*

At Milan I saw a weighing machine on which Eusapia was seated lose weight slowly by about sixteen pounds from one hundred and sixteen pounds to one hundred pounds; but I do not think this very evidential, for it is difficult to read a Roman balance correctly, and in the dim light perhaps full precautions had not been taken to ensure that one of Eusapia's feet was not touching the ground.

Morselli gives one instance in detail from which it would certainly appear that Eusapia was raised in her chair to a height of thirty-two inches as if by an external power. Porro, Morselli, and De Albertis were witnesses to this. They passed their hands between the table and Eusapia's feet, which were over the table. The movement took place rapidly and smoothly in a few seconds, and the descent was gradual. Nevertheless as it took place in almost total darkness, it is difficult to be sure.

Home's levitations are the most extraordinary of any; they have often been described.

"Mr. Home announced to us that he was about to be lifted into the air. A moment later he passed over the table above the heads of those present. I begged him to make a mark on the ceiling with a pencil. As he had none, I got up to lend him mine and only at my utmost reach could I come at his hand which was quite seven feet from the ground. I put the pencil into his hand which kept hold of mine, I accommodating myself to his aërial peregrinations" (*Some Incidents in My Life,* by D. D. Home. Account by Mr. James Watson, solicitor, of Liverpool).

The following account, by the editor of the *Cornhill Magazine,* is stranger still: "By the faint light in the room I saw Home's head indistinctly; some minutes later his voice seemed to come from above: he then said that he would pass before the window and against its pale light we could see the opaque form of his body sil-

houetted. We saw him right across the window in a horizontal posture, feet first. He floated in the air for several minutes and I felt his feet touch my hair. He went as high as the ceiling on which he made a slight mark; after which he descended and resumed his place among us" (*loc. cit.*, p. 224).

These strange facts, whether related of St. Joseph, Stainton Moses, or Home deserve to be borne in mind; but despite the number and the authority of the witnesses, it seems to me that rigid science cannot yet consider levitation as a proven fact.

To admit a fact as scientifically demonstrated, no less positive proof should be required as would justify a death-sentence on a man.

The future will perhaps remove our doubts.

This hesitation, which will perhaps appear overcautious to some persons, should give weight to our absolute affirmation of telekinesis and ectoplasms as genuine metapsychic phenomena. Telekinesis is a proven fact. Ectoplasms are demonstrated. It would, however, be illogical to regard these various phenomena, despite their obvious kinship, as so intimately connected that affirmation or denial of any should involve the affirmation or denial of others.

CHAPTER V

Bilocations

(*a*) *Objective Bilocations*

Just as levitation is connected with telekinesis, so bilocation borders on ectoplasmic appearances. It is vaguely admitted by popular opinion, but is very far from being a demonstrated fact. It will even be seen that there are grave reasons for doubting it and not even one sound proof in its support.

Bilocation signifies the simultaneous presence of an individual in two different places, near together or far apart. Those who believe in it say that the "double" of the person is seen, so that the study of bilocations is also the study of "doubles."

So for other phenomena, a distinction must be made here also between the subjective and the objective.

Bilocation would be objective if there were really a duplicated living body showing material reality simultaneously in two different places. Such objective bilocations are as yet only fantastical legends.

Bilocation is subjective when the form of an individual appears with all the attributes of life to some sensitive at a distance from where the person actually is. This will readily be perceived to be one of the modalities of cryptesthesia, and stories of objective bilocations cannot be given a place in objective metapsychics. The reality of the subjective bilocations in no way implies the reality of objective bilocations.

In the *Lives of the Saints* there are many instances of objective bilocations, all very questionable; it would be unreasonable to give them any scientific weight.

The best known case is that of Alphonse de Liguori who, on the 17th of September, 1774, remained quiet and dumb in his cell at Arezzo, taking no nourishment and speaking to no one. On the morning of the 22d he awoke, and said that he had been at the bedside of the dying Pope. It seems that on the night of the 21st of September Pope Clement XIV died at Rome attended by Alphonse de Liguori.

It is narrated also of St. Francis Xavier that in a shipwreck

in the China seas he was seen simultaneously on board and in a boat with several sailors. Similar stories are told of St. Joseph of Copertino, St. Marie d'Agreda, and others.

Contemporaneous facts are no more definite than these legendary histories. Here is one that seems to me painfully inconclusive, despite the authority of W. T. Stead.[1]

In 1895, in a London church, William Stead saw one of his friends, Mrs. A. Now, Stead knew the lady, who lived in Bayswater, to be very ill, and was alarmed at her imprudence. Stead recognized her clearly; he had time to look in her face and to see all her features. His two sons and Mrs. Stead also recognized Mrs. A. In reality Mrs. A. had not left Bayswater.

This observation is completely nullified by the fact that a lady in black with a large hat, seen in church, might very well be a living person quite different from Mrs. A. A mistake by Stead and his two sons is a thousand times more probable than the presence of Mrs. A.'s phantom moving and acting for over an hour before a hundred persons.

Among the stories of doubles, one of the most astonishing (though unproven), is that told by R. Dale Owen about a century ago. R. Bruce, a Scotsman, second officer on a ship going to Newfoundland, was uncertain of his course. He went to the captain's cabin and there saw an unknown man, writing. Bruce returned to the bridge where he found the captain, and they both returned to the cabin. No one was there, but they found a paper with the words, "Steer north-west." The counsel so strangely given was followed, and after some hours they fell in with a vessel in distress on board of which was a man identified by the second officer as the man he had seen in the captain's cabin (*Footfalls on the Boundary of Another World,* p. 242).

However curious this instance of wireless telegraphy so strangely supplemented, it is doubtful whether this story of Bruce can be transferred from the realm of romance to that of science.

The next case is considered important by Aksakoff, though it rests on a single witness, Mme. de Guldenstubbé. It also dates from far back, so that the phenomenon at least is very questionable, to say no more.

[1]Delanne, *Les apparitions matérialisées,* i, 266. See also Stead, *The experience of a double, Borderland,* 1894, i, 7-22.

The story is of a Mlle. Sagée, a French schoolmistress in Livonia. Mme. de Guldenstubbé was then thirteen years old and was one of the pupils at the school. It seems that the pupils sometimes saw two Mlle. Sagées side by side exactly resembling each other and making the same gestures.

Other stories are told of Mlle. Sagée's bilocations, on which I shall not dilate, for I do not believe them. The phenomena are said to have lasted about eighteen months, but their duration is of no importance and it seems to me impossible to take them seriously.

No better instance of the subjective nature of bilocations can be given than the narrative of F. Hartmann, cited by Bozzano (*Luce e Ombra,* xi, 1911, 180). This, like all Bozzano's writing, deserves to be thought over, even though objective bilocations seem to me quite unsupported by reliable evidence.

The story is of a German lieutenant who was about to get into his bed, when he suddenly saw himself there. He walked about in the room, took a book and tried to read, but could not turn over the pages; he wished to go into the next room, and suddenly found himself there, where he saw one of his comrades. He tried to speak to this man, to shake him and to breathe on him, but to his astonishment this man did not answer. He then wished to go to the railway station, found himself in a tunnel that he did not know, and finally returned to his room where he saw his body shaken by the servant who had found his master nearly lifeless.[1] The evidence would show that the whole thing was a dream.

In the chapter on Monitions there are various cases of the appearing of doubles. These are interesting as monitions but not as doubles, for there is no proof of any objectification of the person appearing. It is most frequently an objectification of *an idea,* in Plato's sense of the word, some knowledge of an external fact having reached the percipient by cryptesthesia, and being then presented under the symbolic form of an idea (image) in Plato's sense of the word. There is, in fine, only an impression made on the percipient which he objectifies as an internal phantom. Unless in the case of collective perception of a double, the only phenomenon that can be admitted as genuine is the impression perceived by the sensitive; and this is no true or material bilocation.

[1]In Chapter III *ante* (p. 113) the term "external autoscopy" has been applied to vision of oneself or of the double as in the classical case of Goethe; but the word is also used for the vision that certain somnambulists have of their internal organs.

The monitions of approaching death announced by bilocations are not premonitions, there being no announcement of the impending event. A hallucinatory vision occurs without any concomitant announcement. What are we to infer from a hallucinatory vision that reveals nothing? Probably there is some relation of cause and effect, since the individual has had an hallucination doubtless for the first time in his life, and that this is an indication of approaching death even though death is not announced.

The following case is one of this type, interesting because it was the personal observation on himself by a distinguished man of science, the zoologist Romanes.

Mr. Romanes, at the moment of waking, the night being ended, saw a veiled form pass in front of his bed. It raised its hands to show its face and Romanes recognized his sister, whom he knew to be slightly ill. Very shortly after this vision the malady developed quickly, became very serious, and she died not long after.

Numerous facts of this kind have been collected by Bozzano.[1]

Usually the phantom more or less resembles a double of the person whose death is near; but such facts always leave room for doubt as to their objectivity, except in cases when the hallucination is collective, as in the case of Mme. Isnard of the Rue Jacob.

Mme. Chapronière had a maid, Mme. Gregory, in her service forty-one years. One night as Gregory was undressing Mme. Chapronière, her double appeared. "What!" said Mme. Chapronière, "I see your double!" Mme. Gregory was in no way disturbed. Three days later she had a slight indisposition which soon became serious and she died just eight days after her double had been seen, at the same hour (*P. S. P. R.*, xi, 448).

Myers cites some similar cases.

There are a certain number of such cases which it is difficult to classify; they are not premonitions, since the phantom makes no announcement, and when entirely subjective they may be considered mere hallucinations without connection with any external event, so that they are neither veridical nor symbolical.

To all seeming, these visions of doubles are only cases of premonitory cryptesthesia. The cloudy forms sometimes seen at death-beds as if an astral body were emerging from the material

[1] *Considérations sur les phénomènes de bilocation, A. S. P.*, 1911, xxi, 65-72, 109-116, 143-151.

body are probably not mere hallucinations. In point of fact: (1) Pathological, non-veridical hallucinations are extremely rare with normal persons who are neither alcoholics nor insane; (2) in not a few cases such visions are collective, excluding the notion of mere hallucination; and (3) veridical hallucinations whose reality as monitions has been fully established, are in all respects similar to these apparitions of doubles.

These, however, are but inferences. We shall not, therefore, class premonitions of death by the apparition of a double, without any intimation of date or place, among the well-established facts of metapsychics.

Mrs. Shagren was arranging her hair before the glass at ten o'clock in the morning, when a form resembling Mr. Hendrickson approached her as if to put a hand on her shoulder. She turned, and said, "Is that you?" but the phantom vanished. She saw it again in her room on the same day. Mr. Hendrickson, whom Mrs. Shagren knew to be very ill, died some days later. On the day that Mrs. Shagren thought she saw him, he had dreamed that he visited her.

There are still more complex and disturbing cases which must not be rejected on the fallacious pretext that they do not happen to fit some particular theory.

The phantom of Mrs. Hawkins was seen by four persons—her two cousins, her nurse, and her son, at intervals more or less considerable; in the first case by two persons at the same time, whose version is identically the same (Myers, *Human Personality,* p. 230).

Two sisters playing the organ in a church both see the phantom of a third sister who had intended to come but had not done so. She appeared in the dress she was wearing and holding a roll of paper which in fact she had in her hand at the time.

In Mrs. Hall's case her own phantom appeared to her, to her husband, and two of her relations as they sat at table.

Frances Reddell, sitting by the bedside of a friend who was seriously ill, saw the phantom of the mother of the sick woman (whom she did not know), but whom she described so exactly that when this lady arrived somewhat later she was recognized by those to whom Frances had spoken. Miss Reddell even described the night-dress and candlestick; confirmed by the parents of the sick girl.

In some cases the bilocation would seem to have been volun-

tary, an effort having been made by A to appear to B. Facts of this kind are few and they are difficult to interpret. In some cases this apparition of the double is seen by several persons at once so that the bilocation is not entirely subjective.

Mr. A. B. manifested to the two Misses Verity, aged twenty-five and eleven. The evidence, verified with extreme care by Myers and Gurney, seems to establish this case as genuine (Delanne, i, 25).

Aksakoff (*Animisme et Spiritisme,* p. 316) quotes the case of Mr. Benning, a clergyman and a member of a circle at Troy (U. S. A.). Mr. Benning, being unable to come to a séance, wrote a letter excusing himself; but fearing that his letter would not arrive in time, he had the curious notion of manifesting (astrally) to the members of the circle. He was seen by several. Two persons not only saw and recognized him—(this is the doubtful point, for there is probably a mistaken identity)—but even touched him, and the phantom seems to have shown sufficient vigour to put one aside and to push the other so strongly as nearly to cause him to fall on the stairs. This extraordinary narrative is lacking in the needful attestations, and must therefore be held very doubtful, to say the least.

The case of the Rev. C. Godfrey is rather better authenticated.

On November 15th, Mr. Godfrey wished to verify personally the fact stated in *Phantasms of the Living,* that in certain exceptional cases a living person could appear to a sensitive. He accordingly sought to appear to Mrs. X. His watch showed 3.40 A.M. Mrs. X. wrote to him on the morning of the 16th of November, 1886: "A little after half-past three I awoke suddenly, feeling uneasy. . . . I lit a candle and went downstairs, then returned to my room, where I saw Mr. Godfrey standing before the window. He wore his usual dress. I raised the candle, looked at him for three or four seconds, and he disappeared."

Mr. Kirk, having made several attempts to appear to Miss G., succeeded on one occasion. The apparition was so distinct that Miss G. could distinguish every detail of his dress. Mr. Kirk, however, was seen *in miniature,* a fact which shows that the vision was entirely subjective (Delanne, *Apparitions materialisées,* p. 206).

A. de Rochas quotes the case of Alma Haemmerle, who saw the phantoms of two of her friends, Stankevitch and Serboff, who had tried to appear to herself and her father: both she and her father

saw the doubles of the two men. This collective vision makes the hypothesis of the purely subjective nature of the phenomenon rather difficult to accept.

Moreover, as has previously been said, the transition between objective and subjective is gradual; in a certain sense all are objective, for in order to produce a veridical hallucination there must be some kind of exterior cause or molecular vibration that starts the cryptesthetic emotion. We must, however, conclude that the phenomenon is subjective in the ordinary sense of the word, for the unknown mechanical vibrations that produce the hallucination do not resemble ordinary mechanical molecular vibrations.

It would be very useful to be able to discriminate more or less accurately between what is objective and what is not. A visual phenomenon might be termed subjective when it does not or would not affect a photographic plate. But as this test can very seldom be applied, a more practical criterion must be found; and we shall call a phenomenon objective only when all the persons present receive the same sensorial impression.

And yet there are grades of objectivity; for when two sensitives think that they see the same phantom there must be some kind of objectivity, even though the phantom might not impress a photographic plate.

If, however, several persons see the same apparition at the same time; if cats and dogs show fear; if, above all, objects are displaced, it is then impossible to deny objectivity in the usual sense of the word. Several cases have been given in the chapter on collective hallucinations.

In support of the reality of bilocation, photographs showing two images, one sharp and distinct, the other nebulous, have often been appealed to; but trickery in photographs is so childishly easy that no importance can be attached to them. Even if the good faith of the photographer is certain, a slip of the camera or a momentary inattention is enough to give two images on the plate. As a novice in photography I often find doubles on my negatives, but this does not cause me any emotion; they are only photographic blunders. To infer a materialized apparition, just because of a second image on a negative, is to show complete absence of critical faculty.

The photographs of doubles as given in the works of Delanne, A. de Rochas, of Commandant Darget and Aksakoff seem to me anything but conclusive. I would not even accept that observed

by my eminent colleague and friend, Istrati (Delanne, 407). In 1893 he made an effort to appear through the camera of Mr. Hasden, director of instruction at Bucharest, and in fact, at a distance of 180 miles, a small figure did appear on a fresh plate developed by Mr. Hasden.[1] The doubtful point is that the little figure is too indistinct to permit of sure recognition.

It is hard to find any experimental defect in the photograph taken by Ochorowicz, though it occasioned a controversy with G. de Fontenay. That taken by Captain Volpi is not evidential.

We must finally conclude that there are not as yet any authentic and unexceptionable instances of objective bilocation and that entirely fresh investigations are required.

(*b*) *Monitions of Approach*

There are certain very common cases of monitions or premonitions accompanied by subjective bilocations that are difficult to classify. They are connected with that common occurrence alluded to in the proverbs of all nations—*Quand on parle du loup, on en voit la queue*—speak of the devil and he will appear—*Quando si parla del sole, il sole spunta.* Probably all the persons who read these lines have had some sort of warning of this nature. The facts are numerous enough to require a special name. Myers calls them Monitions of Approach and the name seems worth retention.[2]

On this subject I will first adduce a fact personally experienced. It is not more evidential than many others, but was minutely scrutinized by myself, my attention having been long given to facts of the kind.

In 188— I was in the habit of going to No. 111 boulevard St. Germain to the office of the *Revue Scientifique,* of which I was the editor, every Wednesday morning. One day, about 9 A.M. while on the right sidewalk, I saw on the left sidewalk Professor Lacassagne of Lyons, who had written an article for the *Revue* three months before, and I thought—M. Lacassagne has come to Paris and he will come to see me. I knew him only

[1]This photograph may be seen in Baraduc's book, *L'âme Humaine,* Paris, 1896. Fig. xxiva.

[2]See also G. C. Ferrari, *Prévision ou prémonition à rappel* (*A. S. P.,* 1905, xv, 385), and Dr. Roch, *Note sur les prévisions de rencontre, Arch. de Psychol.,* Geneva, 1905, v, 149. Dr. Roch gives statistics, but on ten cases only, and draws no positive conclusion.

slightly and our relations were distant. At 10 o'clock, after I had interviewed several persons, his card was brought to me at which I was not surprised, having seen him as above mentioned. But as soon as I saw him at the door, I was aware that it was not he whom I had seen, and I asked him, "Were you on the boulevard St. Germain at 9 this morning?" he replied, "Certainly not. I was there at 7, and I came here direct from the Val-de-Grace." So I had thought (1) that I had clearly seen him; (2) I had no reason to think that he was in Paris, and (3) it was not he that I saw.

However curious this fact of lucidity, no scientific inference can be drawn from it, for it may well have chanced that some person vaguely resembling him had passed at that time and thus aroused a reminiscence of him in my mind.

But I do not think it was chance; I would rather attribute it to a vague and passing cryptesthesia. If so, does the cryptesthesia refer to the past or to the future? Was it because he had passed that way or because he was going to do so two hours later?

Such cases are innumerable, and if I quote this one it is because I have thought long over it and can find no reasonable solution.

Among the facts of this kind narrated by Myers, I will quote some that seem to me important.

Mr. Carroll sees in his room at Towcester the image of his brother who lived in London. He was frightened, but before he could recover himself, he heard a knock at his door. This time it was really his brother who had come unannounced from London to see him. It should be added that his brother was not sure of the house and had knocked on the chance of being right.

Mr. Stevenson was sitting at home, by his wife, at seven in the evening. All was quiet when he suddenly heard the words, "David has come." He thought his wife had spoken and asked her, but she denied having said anything. Now David, his brother, usually came in at 10 P.M. Three minutes after having heard this voice quite clearly, the door opened and David came in.

Mrs. A. was waiting for her husband who had been out to an Indian village, and being uneasy, went with her younger sister to meet him. At 6 P.M. they saw him driving up in a carriage drawn by his grey horse. Suddenly nothing was visible, but an hour and a half later he drove up with his grey horse.

In *Human Personality,* Myers gives (p. 229) the instance of Colonel Bigge who saw one of his colleagues in fishing costume

and with an outfit of which Colonel Bigge had no knowledge whatever, ten minutes before this colleague appeared at the place. This is simply a case of cryptesthesia, possibly premonitory; it would be absurd to imagine bilocation.

Mrs. Munro had invited Dr. Jackson for a visit; but he had refused. At 2 A.M. one morning she awoke, hearing Dr. Jackson calling at the wicket gate three hundred yards distant. Under ordinary conditions no call would be heard, there being houses intervening. But Mrs. Munro heard, and called her husband, who at first thought the matter an illusion. But Dr. Jackson arrived a few minutes later. It is unlikely that this was a monition of approach, and a double is more unlikely still; it was probably a case of auditive hyperesthesia during sleep.

The monitions of approach rarely take an auditive form as in the case of Mr. Saunders, an old and very deaf man of 84, who, on January 8th, at 7.30, heard a voice saying, "Tom will arrive today." Tom was a soldier in France during the war, and the day before a letter had been received from him saying he would write again. Some hours after this auditive monition Tom arrived (*J. S. P. R.*, 1919, xix, 30-32).

The following is an unpublished monition of approach, very interesting, for it was accurately observed by Stella in her own case.

In the little town of S., she was going with her brother for a run in an automobile, and being late they hurried to the place where it was to be waiting. Suddenly Stella saw, in front and approaching them, their friend Olivier who was to meet them at the same place. Stella said to her brother, "Here is Olivier," and made a gesture of recognition with the cane she had in her hand; but her brother could see nothing. At the very moment that the vision disappeared, Olivier himself came up behind them and touched Stella's brother on the shoulder. Stella and her brother were vastly surprised; for they had not suspected his presence, and as they were late they thought to find him already at the meeting-place. They had not looked behind them once when coming up the street, as Olivier immediately asked them; and he also is quite sure that they did not turn round once. Therefore they could not have seen him directly.

But even if Stella by indirect vision could have seen Olivier approaching (though this is unlikely) such vision must have been subconscious. In such an event this subconscious vision would

have been symbolized by a veridical hallucination, which would be instructive on the theory of symbolization; for Stella had seen Olivier *in front of her,* just as if alive; so much so that she had saluted him with her cane.

I think, however, that she had caught no indirect glimpse of him and that this is an excellent instance of monition of approach; the cryptesthetic notion being interpreted by a visual hallucination, which, moreover, was entirely subjective, since her brother saw nothing when she said, "Here is Olivier."

Cases of auditive or visual hallucination announcing the approach are rare, but illusion of the approach is quite common. It would be valuable for metapsychic science if someone would take the trouble to collect some kind of statistics of these happenings, but this would not be an easy matter; on the contrary, it would need a real scientific training and scrupulous exactitude. Cases in which the meeting with a particular person had been foreseen should be entered in a note-book, and only the cases so noted taken account of.

The difficulty, one not easily avoided, would be that unfortunately one is tempted to take into account only the cases in which the anticipation has been verified and to neglect the others.

These approaches are usually manifested as illusions. Some person is seen, and we say, "Here comes A.," A. not having been seen for a long while and his presence being unlikely. But soon one perceives that it is not A. who has been seen, but some one who is like him (or even who is not like him, which is strange enough); and a few steps farther on A. is seen in flesh and blood. Statistics on monitions of approach, both those with positive and those with negative results, would certainly lead to curious conclusions; but the records we have on the subject are imperfect and sparse.

Whatever the cause may be, instances such as those named above show the reality of cryptesthetic monitions of approach; but every reservation must be maintained on the objectivity of bilocations, and though the mystery is profound we shall hold them as non-objective.

Various theories might be evolved, but with our present data it is better to abstain. All that has been said about odic perceptions, astral radiation, human effluvia, and the like are so vague and unsatisfactory that it is much wiser to avow our total ignorance.

CHAPTER VI

HAUNTINGS

1. *On Hauntings in General*

If traditions and superstitions could be appealed to, the haunting of certain dwellings would be one of the most certain facts of metapsychics; for in all countries and in all times, without exception, these phenomena have been recognized by popular opinion.[1]

Without attaching any weight to this popular unanimity, it can hardly be supposed that at the back of all these stories there is not some vestige, however slight and obscure, of truth. It would therefore be almost as absurd to reject without examination all

[1]The bibliography of ancient cases is enormous. Joseph Glanvil (*Saducismus Triumphatus,* 1700) considered, even then, that poltergeist phenomena—otherwise "haunted houses"—could not be accounted for by fraud or hallucination. Petrus Thyraeus: *De infestis ob molestantes dæmoniorum et defunctorum spiritus locis,* Cologne, 1598. Dale Owen, *Footfalls on the Boundary of Another World,* London, 1860. Zingaropoli: *Gesta di uno spirito nel monastero dei PP. Gerolomini in Napoli;* Cronaca del secolo xvii, with preface by E. Passaro; *Sulle manifestazioni spontane misteriose,* Napoli, Detken, 1904.

More modern works will be indicated in the course of this chapter. I mention below, just by way of curiosity, the towns in which there have been apparitions and alleged hauntings, according to Passaro:

Great Britain: Woodstock (1649); Tedworth (1661); Epworth (1716); Lessinghall (1679); Liverpool (1868); B. (Eosa) (1862); Manchester (1902); Beverley (1903); Guernsey (1903).

France: Lyons (1528); Cideville (1850); Paris (1846); Saint-Quentin (1849); Algiers (1871); Valence-en-Brie (1897); Brussels (1890); Grivegnée (Belgium) (1900); Bordeaux (1867); Nice (1858).

Italy: Naples (1696); Lanzo (1762); Florence (1867); Bologna (1591); Vicenza (1875); Malta (1700); Genoa (1865); Pavia, Modena (1875); Rome (1876 and 1881); Trieste (1881); Turin (1903); Catania (1879).

Germany: Hudemuhlen (1584); Dibbelsdorff (1762); Orlach (1831); Weinsberg (1835); Bergzabern (1852); Munchoff (1818); Groeben (1718); Schildbach (1533); Berlin (1890); Mulldorff (1749); Cologne (1865); Resau (1899); Billingheim (1887); Möhthingen (1841).

Other countries: Lipzy (Russia, 1852); Zurich (1860); Mustaja (Russia, 1870); Silin (Russia, 1888); Riga (Russia, 1583); Constantinople (1746); Philadelphia (1866); Guayaquil (1871); Rota (Spain, 1870); Petersburg (1902); Budapest (1902); Nienadowka (1898); San Francisco (1899); Slàtesborough (Georgia, 1891); Ceylon (1902).

that has been said on haunted houses, as to accept it all without criticism.

Some men of science who are interested in occult psychics have endeavoured to study the question; but it has been found that all researches conducted in a scientific manner on haunted houses have given very poor results. The facts evaporate under severe and rigorous investigation. This is a reason for doubt, but not for denial. It is not to be supposed that there should be any incompatibility between the phenomena of haunting and scientific verification; so that the lack of scientific evidence is in itself a strong presumption against the reality of the phenomena.

But this is only a presumption, not a certainty. It remains to be seen if the mass of testimony contains sufficient evidence to warrant some of the phenomena being accepted as true. We must limit ourselves to a critical study of the evidence, since unfortunately no experimental analysis of the phenomena is possible. The history of haunted houses contains very little that can properly be called experimental; there are only observations.

Moreover it is difficult to distinguish hauntings from other metapsychic phenomena. Some might be classed as hallucinations or collective monitions, some under cryptesthesia, more often, as telekinesis. All classification is artificial, and as already often said, facts, when they occur, do not trouble themselves about fitting into any particular section of a scientific treatise.

Therefore it is exceedingly difficult to lay down definitions and delimitations of haunting; though the dominant idea seems to be *spatial*. The phenomena, whether subjective or objective, are of a mixed nature, but they occur in a particular locality and not elsewhere: everything happens as though this localization in space were one of the conditions of the phenomena.

This is obviously an essential fact to be seriously considered. If the hauntings are genuine, they are localized in some old castle or in some particular room of a house so that we might almost conclude that there is some emanation proceeding from inert things in that place; for it would be absurd to think that *spirits* are chained by terrestrial material links to the places where they appear. If they come in "the blue room" of a certain house, there must be something in the blue room that retains them or produces them.

This is what Bozzano calls the psychometric hypothesis of *infestations*. I should prefer to call it the pragmatic hypothesis;

but the Italian word *infestazione* seems to me preferable to *haunting*.

It seems impossible not to admit this hypothesis, partially, at any rate; for we cannot gratuitously attribute to *spirits* a fancy never to leave a particular place when they might wander elsewhere.

A provisional definition of haunting or infestation may be given as: Metapsychic phenomena, objective or subjective, produced repeatedly in a given place.

This definition is, however, somewhat defective, as it does not apply to every case. There are hauntings that seem to attach to persons rather than to places: and movements of objects produced in the neighbourhood of a haunted or "infested" person can scarcely be classed as hauntings. They are phenomena of telekinesis involuntary and non-experimental, and thus differentiated from the experimental telekinesis previously studied in this book. They are not true hauntings under the somewhat arbitrary definition that limits haunting to places.

We shall therefore consider hauntings under two heads; speaking first of houses haunted by phantoms, and then of material phenomena attaching to persons rather than to houses. There would therefore seem to be not only haunted houses but haunted persons; indeed it is probable that many instances of haunted houses really are cases of haunted persons.

Phenomena of haunting which consist of an apparition having well-defined specific characteristics, but seen by one person only at a time and without any movement of objects, are classed as subjective. Objective phenomena are those in which movements of objects and external mechanical action take place.

Even this division is a convention, for the objective and the subjective are frequently intermingled, so that we must follow Bozzano and speak of hauntings that are *mainly* objective, or *mainly* subjective.[1]

[1]No really correct classification can be made because of this admixture. Having no personal experience to quote, I must rely on those authors who have seriously studied the facts: C. Lombroso, *Ricerche sui fenomeni ipnotici e spiritici,* Chapter XII, *Case fantomatiche,* Turin, 1909. F. Zingaropoli, *Case infestate dagli spiriti,* Naples, Soc. Partonopea, 1907. *P. S. P. R.* and *J. S. P. R. passim.* The admirable study by Bozzano, *Dei fenomeni d'infestazione,* Rome, Ed. *Luce e Ombra,* 1919, should be specially consulted. I shall borrow much from this striking synthesis, as I have done in the chapter on Premonitions.

In certain very rare cases the phenomena are entirely subjective, though there is cryptesthesia, and recognition too clear for the fact to be referred to pathological hallucination.

Mrs. O'Donnell (*J. S. P. R.*, viii, 326) goes to Brighton and hires furnished rooms. She does not sleep in the same room with her daughter. At one o'clock in the morning she hears steps on the floor above so loud that they seem due to a number of people, lasting the whole night. In the morning she says to the landlady, "The people on the upper floor have no consideration for others," and is answered with some surprise that the upper floor is unoccupied. The following day after the same noisy tramplings Mrs. O'Donnell sees a horrible spectre pointing to the next room. She even feels a cold hand touch her and almost faints with fright. The phantom was that of a small, dark man. Her daughter saw and heard nothing. On the night following the same spectre reappeared though the door was locked.

After enquiry, it was ascertained that some weeks before, the room had been inhabited by a small, dark man who had thrown himself from the window of the next room (Bozzano, p. 77).

This is a good instance of subjective cryptesthesia, for the facts were perceived by Mrs. O'Donnell only, and not by her daughter.

Bozzano describes auditive and visual phenomena as follows (I give a very free translation, greatly abridged):

"Auditory phenomena consist of noises without any apparent cause, varying from knocks of differing strength to crashes of broken glass and crockery, falling of chairs, doors and windows opening and shutting violently, rolling of heavy bodies and movements of chairs. Often there are footsteps, seemingly human, in the passages and on the stairs, rustling of clothes, despairing cries, sighs, sobs or religious psalmody, songs, and musical sounds.

"It is highly probable that these phenomena, though mingled with objective facts, are mainly subjective; they are, however, often heard by several persons, so that in many well-authenticated cases they are frankly objective.

"Under their visual shape these phenomena appear as luminous manifestations or phantoms. The luminous manifestations may be of undefined shape, or lights by which the phantom is seen. In some very few cases the light is in the hands of the phantom.

"Except for some very exceptional apparitions of animals, phantoms are human, and clothed in the garments of the period of their terrestrial life. Sometimes they seem solid as in life, in other cases

they are transparent and nebulous like shades; usually they seem to enter by a door, proceed to another room, and vanish. They often arise unexpectedly, dissolving into vapour and passing through walls and closed doors. Sometimes they appear to walk, sometimes to be suspended in the air. Usually the period of infestation only lasts for a few years, a few months, or even a few days; but the haunting is often prolonged over many years, with long intervals.

"The arrival of phantoms is nearly always heralded by a vague sensation of horror, the feeling of a presence, coinciding with a cold breath. They seem nearly always wholly indifferent to the living persons present. Sometimes they enact some domestic function, or make despairing gestures. Great differences are observable in their behaviour."

Do these phenomena correspond to an objective reality, or are they merely hallucinations?

The hypothesis of trickery and fraud must first be eliminated. Out of the 374 cases that Bozzano considers worthy of mention there is perhaps not a single one which is attributable to fraud and lying.[1]

To make our ideas clear, we will imagine a typical case as follows:

A, arriving for the first time at a certain locality, M, sees a phantom, which he does not recognize, and which he describes. Some days later another person, B, coming to the same place, sees a phantom similar to that seen by A. Further enquiry shows that two or three years previously some individual disappeared under tragic circumstances at M, and his description agrees with what A and B have seen. A and B are both ignorant of the tragic associations of the house, M, though they may have heard vaguely that it is haunted. At no time in their lives have A or B had hallucinations, they are little disposed to mysticism, and they are persons of well-balanced intelligence.

Such are the usual conditions of subjective hauntings.

It seems improbable that the hallucinations of A and B are devoid of some veridical foundations; for (1) pathological hallucinations in normal persons are extremely rare; (2) the agreement in the hallucinations is strong evidence; (3) there is a correspondence

[1]It is different in the case of objective hauntings when objects are thrown about, for gross frauds often occur in these cases, perhaps in most of them.

between the identical hallucinations and the tragic event, and (4) monitions by veridical hallucinations are so frequent that they must be considered scientifically established, and can be applied with slight variations to hallucinations of hauntings; the sequence in both cases being analogous.

If the evidence for the existence of phantoms rested only on the evidence for hauntings, we would certainly be unable to come to any conclusion; for despite the unquestionable veracity of the witnesses, they are neither sufficiently numerous nor is their standing such as to warrant acceptance of the extraordinary and unlikely phenomenon of a materialization. But materializations are abundantly proved from experimental data, and the notion may be applied to phenomena of haunting; for all explanations of these latter, except as a partial or complete materialization, are wire-drawn and scarcely defensible.

Since several persons see practically the same phantom it cannot be considered entirely subjective. In order that A, B, and C should see the same figure, D, there must be some vibration exterior to them that arouses the image D in their brains. Consequently the image originates in an exterior phenomenon and is to that degree objective, though that is not objectivity as we generally understand it. When a phantom is seen by three persons only, ten others present seeing and hearing nothing, and the photographic plate shows nothing, the phantom is not objective in the ordinary sense.

In daily life if there is a palm-tree and twenty persons round it they will all see it; and if there were ten thousand they would all see it, for it is frankly objective; it could be photographed, drawn, described, the wind could be heard in its leaves and the trunk could be touched. But a phenomenon of cryptesthesia is of a different kind, for whether it concerns monitions or hauntings, the faculty of cryptesthesia varies enormously in different persons, dealing with cognitions of another order which do not reach the intelligence by the usual channels, and can be perceived only by a sensitive.

An absolutely deaf man would not hear a loud whistle beside him and might deny its objectivity. His negation would not prove that there was no whistle; and similarly the absence of sensation among non-sensitives does not prove that there is no external vibration.

What are the external objective phenomena that arouse a veridical hallucination?

The uncertainty here is so absolute that all hypotheses can claim consideration.

A. Is it an impression left on things, an emanation from them?

B. Is it the astral body of a deceased human being?

C. Is it an intelligent but non-human force that comes to notify its presence?

These three hypotheses will now be briefly discussed.

A. It is possible that an effluvium that we do not know proceeds from things. The magnet seems an inert object till a piece of iron is brought near it; but it reveals great energy in presence of the iron. Similarly apparently inert objects might reveal hidden energies. The ring long worn by an individual might accumulate properties characteristic of the wearer which it had not when it left the jeweller's hands. A dog recognizes his master's glove, for the glove has taken the scent of the hand, imperceptible to our imperfect sense but perceptible to that of the dog. Could there not be mysterious energies stored up in things that may awaken precise images in sensitives? If it were so, the principal cases of haunting might be thus explained; though this is not an explanation, but a verbal expression given to a phenomenon that is not understood.

Bozzano has discussed this "psychometric hypothesis" (which I prefer to call *pragmatic*) and decides that it is insufficient, giving his reasons for this conclusion. I shall here mention two only, which seem very serious:

Firstly, there are phenomena of infestation in places that have no relation (as far as can be known) with the suicide, murder, or other tragical fact that seems to have originated the haunting.

Secondly, and more especially, because these apparitions seem to show an intention, a purpose, a monition, sometimes a premonition and occasionally have a periodicity characterized by a certain rhythm and in any case show the action of a personality which does not seem to be that of the sensitive, and still less the property of an inert object.

It seems to me puerile to endeavour to penetrate farther, and in short the pragmatic hypothesis is plainly insufficient. Moreover its weakness is apparent in that it is applicable only to subjective facts of haunting, and in no way to the objective facts.

Do the other hypotheses show more likelihood?

B. The phantoms are those of deceased persons: ghosts, *revenants,* in the textual sense of the word. And at first sight this explanation seems simple.

But what absurdities it involves!

Why those persons only and not others? For millions of tragic events occur continually, everywhere, without causing any haunting whatsoever. Often insignificant causes would seem to have decided the ghost to return. And this ghost seems to have a very curious mentality; he throws stones, breaks bottles, and opens doors with violence. He is frankly inept, and shows an ineptitude that belongs to the animal rather than to the man. Since intelligence has vanished with the brain, and the body has undergone putrefaction, how can the dead man live again, even under a nebulous phantasmal form?

We have already seen that the identity of spirits with such and such a deceased person (which implies human survival) is very difficult to accept, even with such seemingly strong proofs as those in connection with Raymond Lodge and George Pelham. How much weaker and tenuous are the few proofs of indentity given by ghosts!

C. There remains the third hypothesis that there are spirits (angels or demons) who are intelligent powers, entirely different from humanity, able to do anything objectively or subjectively.

This hypothesis is convenient, even much too convenient, for to admit all-powerful and omniscient beings is much the same as to admit our entire ignorance. I prefer to suppose a human energy similar to the ectoplasm coinciding with a certain degree of lucidity, causing such and such forms to appear. But this, too, is unsatisfactory and wire-drawn; even ridiculous. Nevertheless, being unable to see any cause, I would accept this opinion provisionally as a working hypothesis such as one is obliged to use in a dawning science.

As to the character of these forces, if they exist (which is not at all certain), I will not allow myself any hypothesis at all. Most religions admit the existence of evil spirits. The hypothesis of the devil explains everything to some minds. Haunted houses are exorcised. The devil becomes the *Deus ex machina.*

Even spiritualists, followers of Allan Kardec, believe that there are evil spirits, a notion that disposes of all psychological difficulties and contradictions with a word. The discords of the subconscious, the trivialities, the coarse jests, deceiving for the sake of deceiving, are, according to spiritualists, the work of evil spirits. All the disturbances in haunted houses, according to them, are made by bad spirits. According to certain ecclesiastics it is the devil who makes all the noise.

But all this hypothesis of the devil and evil spirits is really very primitive anthropomorphism.

Even if I were to admit (which I cannot bring myself to do) that there is any intervention by non-human intelligent powers, I should refuse to believe that these share our imperfect notions on good and evil.

I will say no more on these theories, for they are all so feeble, so essentially and necessarily feeble, that we must await new facts and fresh evidence before building on the old. I shall therefore relate as briefly as possible some of the facts of haunting, but I shall not criticize each in detail, preferring to leave them to the reader's own judgment. I shall, however, permit myself a (timid) expression of personal opinion by drawing the inferences that may be deduced from them.

2. *On the Hauntings of Houses (Subjective)*

Hauntings, properly so called, are those in which an apparition manifests itself in a house said to be infested.

Up to what point is the phenomenon entirely subjective? This is an obscure question to which the facts, poor in quality and few in number, do not permit a decided answer.

An English ecclesiastic[1] went with his wife to take up his duties in a new parish, and entered their vicarage, a comfortable house at some distance from the village. They had no servants, a woman came in to do the housework; and in the evening they locked the house up.

During the night they heard great crashes like cannon-shot rolling on the floors, which woke them up and lasted for part of the

[1]Case of Bozzano, *Report of the committee on Haunted Houses, P. S. P. R.*, March, 1884, p. 144. The members of the committee were: Rev. Bushell, Hughes, A. P. Perceval Keep, F. Podmore, Hensleigh Wedgewood, and Ed. R. Pease.

night. They got up but could find nothing abnormal. The woman who came to do their work would not stay a night in the house.

The next evening at 8 P.M. the noises began again; this time human footsteps "walking slowly but firmly." Then, for two weeks, there was nothing. Then the noises began again; knocks, sometimes very loud and quick, sometimes feeble and hesitating. Every week on Saturday night at two o'clock in the morning the disturbance began again—knockings, footsteps, and fall of metallic bodies. This went on for a year, and in the end the vicar and his wife left the village.

A friend who came to the house also heard the noises, and as they were perceived both by the vicar and his wife, they must be admitted as objective. Possibly complicity of the servant is not absolutely disproved.

The noises heard by Dr. Kinnaman cannot be considered as proving anything. It is the queer story of a young student named Adams who bequeathed his skeleton to his friend Dr. Kinnaman, on condition that the latter would keep it for his anatomical studies. Some years later, as the skeleton was in the way, it was relegated to a shed; and then such noises and crashes were heard that a better place had to be found for Adams's bones. Adams would then seem to have been satisfied, and kept quiet.

This improbable and amusing tale is more like a comic novel than a real fact.

Miss R. Morton,[1] a medical student, came in 1882 to live in a house at Clifton. In this house there had been a domestic drama twenty years before. One evening, Miss Morton hearing noises at her door went into the passage and saw a tall lady in a widow's cap and a black woollen dress, holding a handkerchief to her face.

Between 1882 and 1884 Miss Morton saw this shape five or six times. Her sister, her brother, the housemaid, and a child saw it too. "Sometimes," says Miss Morton, "she tried to speak to me, but only gave a slight sigh." The subjectivity of the phantom, although it was seen by the brother and sister, is proved by the fact that sometimes Miss Morton could see it distinctly when other persons present saw nothing. Nevertheless—and this is highly important as proving that Miss Morton's hallucination was not entirely subjective—one evening in August at 8 P.M. four persons saw the phantom at the same moment. From 1884 to 1885

[1]Myers, *P. S. P. R.*, viii, 311. Bozzano's case 11.

the apparition showed itself most frequently. From 1886 it became more nebulous and indistinct; in 1889 nothing could be seen though steps were still heard as late as 1892.

This case is instructive, for it shows that objectivity may be incomplete. The phantom was subjective, for it was not seen by all the persons present, but yet was sometimes seen by several persons as a collective visualization. The persistence in one locality will also be noted.

There is a very curious and ancient case of haunting reported by Pliny the Younger (*Letters,* vii, 27).

"Erat Athenis spatiosa et capax domus, sed infamis et pestilens. Per silentium noctis sonus ferri, et, si attenderes acrius, strepitus vinculorum longius primo, deinde e proximo reddebatur: mox apparebat idolon, senex macie et squalore confectus, promissa barba, horrenti capillo; cruribus compedes, manibus catenas gerebat et quatiebat."

It seems that the house was abandoned; no one would buy it or live in it. The philosopher Athenodorus, however, did not hesitate to brave the phantom. He installed himself in the house with his tablets and a light and started writing. At midnight the phantom came. *"Stabat effigies innuebatque digito, similis vocanti: hic contra ut paulum exspectaret manu significat, rursusque ceris et stilo incumbit.* (If the story is true, Athenodorus showed remarkable coolness.) *Illa scribentis capiti catenis insonabat. Respicit rursus idem quod prius innuentem, nec moratus tollit lumen et sequitur. Ibat illo lento gradu quasi gravis vinculis. . . ."* In short the phantom disappeared, leaving Athenodorus in a lonely place, which the philosopher marked so as to know it again. Next morning the magistrates made excavations and a skeleton was found, which was publicly buried. From that time the haunting ceased.

No verification can be had for an event two thousand years old, but the similarity, or rather the identity, of the ancient hauntings with those of today should make even the most sceptical think over them.

At St. Boswell a phantom appeared to several persons—to Miss Scott and to her sister Louise Scott, and to Miss Irvine. About ten other persons also saw it between 1893 and 1901. The form was that of a man dressed in black, with a long black cloak of ancient fashion, a white cravat, and a broad-brimmed hat. He was thin and pale, and appeared in the open street. Miss Scott

having tried to overtake him he moved before her, too quickly to be overtaken. It seems that two boys of the village once saw him appear with a threatening gesture; they fled and the phantom vanished. The people of St. Boswell are not inclined to risk themselves in that street at night.[1]

Miss Bedford (*J. S. P. R.*, xii, 18; Bozzano's case 8) saw at W., on the road near a river, the form of a man looking despairingly at the water. Her friend Miss Locke had also seen him some time previously. It seems that at that very place a man had thrown himself into the river through a disappointment in love. Mrs. Locke (Miss Locke's mother) saw the same phantom several times.

Mrs. Vatas Simpson relates that when a child, playing with her brothers and sisters, she saw an old woman slowly mounting the stairs at the top of which she disappeared without opening the door facing the staircase. She then saw her on the other side of the door. Though all happened long ago she remembers quite well that her brothers also saw the same form and not on that day only, but on following days. Her mother noted the fact in her diary, adding that in this house, which had the reputation of being haunted, she had seen not only the old lady, but others. There were sounds of footsteps and the wailing of an infant. One day Mr. Vatas Simpson was annoyed by footsteps in his room, though the servants had allowed no one to enter. He went in and saw an old woman, small, thin, and very pale, wearing a large hat whose ribbons were tied under her chin. Her hands were clasped. He thought her a real person, but she vanished in front of him.

When a child, Mrs. Louise du Cane, and also her brothers and a sister, saw the reflection of a phantom in a mirror, but this case is not very evidential (communicated by Dr. Kingston, *J. S. P. R.*, v, 223; Bozzano's case 10).

Bozzano cites the case of a phantom seen by several persons in full daylight for some minutes and on several occasions. It was a woman dressed in black that Mr. W.-D. G. saw sitting before the toilet-glass. It is curious that the mirror did not reflect the phantom.

If this case was well observed, which is problematical, it is interesting as showing that the image was subjective, produced by auto-suggestion. If the phantom had been objective it would

[1] *J. S. P. R.*, vi, 146 and ix, 298, case V. de Bozzano, 47.

have been seen in the mirror. Its objectivity was therefore not of the same order as that of normal objects.

Miss Lucy Brown and Mary Brown (pseudonyms) were residing in a house where tragic events had taken place, a woman having hanged herself. Besides this a part of the house had been destroyed by a fire, and a woman had perished in the flames. According to the summary of the depositions of the Misses Brown given by Myers the phantom of the woman who had been burned was seen by Mary and Lucy Brown simultaneously three times, and once by each of them singly. The servants had seen it also, but their testimony was not available. Mrs. Jones, whose phantom was seen, was unknown to the Brown sisters, but their description corresponds well with that of Mrs. Jones by those who knew her. The phantom seemed to repeat the despairing gestures which Mrs. Jones had been seen to make in the burning room (Myers, *J. S. P. R.*, iv, 1899, 27-30; Bozzano's case 13).

The fact that a person long dead may manifest to several persons in the place he had lived in is borne out by the following story told by two sisters, Mrs. Judd and Mrs. Dear (Caroline and Mary), both very trustworthy (Delanne, *Les apparitions materialisées,* 1911, ii, 81):

Three weeks after her grandmother's death, Caroline, on waking one morning in October, 1866, saw distinctly the form of her grandmother, as she well remembered it, tall, calm in aspect, with her large dark eyes fixed on the face of the old clock. Caroline closed her eyes for a few seconds, then slowly reopened them. The form was still there, then quickly vanished. Mary had the same vision in the same room at the same hour. She only spoke of it in the evening, having kept silence all day from fear of ridicule.

Ten or twelve officers were dining in their mess at Aldershot. Suddenly all saw a young woman in bridal dress, soiled and worn, who passed slowly before the window. No one could have passed there, for the window is thirty feet above the ground (*Telepathic hallucinations,* 356).

L. Tyre saw in her room about 6 P.M. an old woman lying down fully dressed on the bed, her face being turned towards the window. Mrs. Tyre's two sisters who came in saw nothing, the bed was empty and the coverlet undisturbed; Mrs. Tyre, however, still continued to see the old woman and described her. She again saw the phantom two days later, she alone perceiving it. She saw it very often, so often that they became used to it and called it "L.'s

old woman." But it was never seen but by her (Delanne, *Appar. materialisées,* ii, 26). We are therefore compelled to think that it was a hallucination; but possibly it was veridical, for it seems that the description given corresponds exactly with an old woman who died in the house some years previously. These recognitions are, however, so uncertain that they have no value, and one must suppose that this was a mere hallucination without any objective reality.[1]

Miss A. sees in her room a cousin, Mrs. X., six months dead, sitting in a white dress, with a pleated neck-tie. Fifteen days later the same phantom returned, walked to the bed where Miss A. was lying, and threw the bedclothes to the ground. Miss A., terrified, lit the gas and saw nothing (Delanne, ii, 102).

Some time later, in a neighbouring house, Mr. X., the husband of the deceased woman, twice saw the form of a woman whose features he could not distinguish. There was a loud crash in the room, waking Mr. X.'s young son.

Mrs. X.'s sister saw the same phantom which tried to lift the bedclothes as in Miss A.'s case. The phantom reappeared three times, at intervals of several days. Doors opened, and footsteps were heard on the stairs.

Thus, says Delanne, an apparition was seen seven times by four different persons. Most of the appearances were too long after the death for them to be ascribed to the emotions of a recent loss. All the same, the authenticity of these phenomena is very doubtful; for the scientific standing of the witnesses is insufficient to warrant the acceptance of such extraordinary facts.

Miss H., at Malta, aged eight years, saw, eight days after her mother's death, the phantom of her mother standing by her bed, weeping and wringing her hands. The child cried out, and her Maltese nurse came, who *felt* something terrible but undefinable, and fell on her knees to pray. The father of Miss H. also saw the same apparition (Delanne, ii, 84).

Mrs. R. of Philadelphia, widow of Dr. R., being in the central hall of her house with her eldest daughter aged nineteen, saw (and her daughter also) a woman dressed in black with a white neckerchief over her head enter the hall, carrying a white silk

[1]Although such are very rare, there may be hallucinations among normal persons. Mr. Marillier has described a personal experience: for a whole month he had the hallucination of a woman entering his room and standing by him (*Revue philosophique*).

purse. A younger daughter also saw the apparition, but less distinctly. The form stopped a moment before the portrait of Dr. R., and seemed to be looking at it for about half a minute, then disappeared without the door having been opened. The form was recognized as that of the grandmother of the girls, who had died ten years previously. It is to be noted that she had not lived in the house where she appeared (R. Dale Owen, *The Debatable Land,* 319).

In his valuable study, *Dei fenomeni d'infestazione,* Bozzano gives different cases in which the ghost seems to indicate his wishes, or to show regret for an act done in life. But as these cases are not of collective visions, it is more rational to suppose that they are hallucinations, illusions, and imaginings. Provisionally at any rate they must be excluded from metapsychic science. All the *intentions* attributed to phantoms are too fanciful and too simply anthropomorphic to be insisted upon.

The lights that appear in certain places pertain also to phenomena of haunting. M. Duchatel has collected numerous statements regarding a light that appeared at Busso, in Corsica, near Bocognano. Was this a natural phenomenon? *A priori* this seems highly probable. It seems that the light vanished as soon as anyone approached the place where it seemed to be. All this is very vague, and cannot be taken seriously (*A. S. P.,* February, 1913, 34-40).

Similar facts which rest on the slight foundation of popular legend have been alleged at Berbenno (Valteline); at Vo; in Italy at Padua; at Saint-Julien (Soissons); in Cardiganshire; at Quargento (Piedmont) and Grand-Fougeray (Ille-et-Vilaine). Nothing can be founded on these tales, but it seems well to mention them, in the event of similar phenomena being made the subject of careful scientific investigation.

The following is a fact equally difficult to accept or to reject—it is reported by Mrs. Sidgwick (*P. S. P. R.,* iii, 76, 1885):

Two ladies, Mrs. F. and her sister, saw in the street during a thick fog numerous human forms passing by. Some were tall persons which seemed to enter the body of one of the two sisters. The servant who was with the two ladies cried out in terror. In this crowd of phantoms there were men, women, and dogs. The women wore high bonnets and large shawls of old fashion. Their faces were livid and cadaverous. The whole phantasmal troop accompanied Mrs. F. and her sister about three hundred yards.

Sometimes they seemed to be lit up by a kind of yellow light. When Mrs. F., her sister, and the servant reached their house only one single individual of the crowd, taller than the others and hideous in appearance, remained. He then disappeared also. This hallucination is unique of its kind, and therefore cannot be used, though it was collective and simultaneous. It seems difficult to refer so precise a description to an effect of fog.

To this singular story may be added another, also insufficiently supported—that of a somewhat similar hallucination of two ladies who, at the Trianon (Versailles) thought they saw a reunion of personages dressed in the fashion of 1785 in the time of Marie Antoinette (Bozzano, 143). It is difficult not to suppose this a prolonged hallucination; somnambules under hypnotism could tell many such stories.

Occurrences of this kind must not be admitted into the annals of metapsychics. In every isolated exceptional case, we ought to wait, without trying to explain or to understand, and *provisionally,* to take these cases as not having occurred.

3. *Telekinesis in Haunted Houses*

The causes of error (which should always be considered first) are not the same for objective as for subjective infestations. The subjective phenomena depend on the good faith, never doubtful, of the observers, but good faith is not enough; an aberration, a hallucination, or an illusion is always to be suspected. It concerns us, then, to know whether everything can be explained by illusion. This hypothesis must be admitted when the observer is only one person, but it is difficult to imagine four or five normal persons having the same hallucination again and again for several months.

But with objective phenomena the difficulty is quite otherwise. In such cases all kinds of frauds are possible, and experience shows that such frauds are very frequent. When in a house said to be haunted crashes are heard, the opening and shutting of doors, rolling furniture, breakage of crockery, and all the train of ridiculous manifestations common to such cases, the idea naturally occurs of a practical joke made by ill-disposed persons, by dismissed servants, or by those interested in getting rid of some of the inmates. Very usually the cause of such infestations must be attributed to very young persons of either sex, half idiots and half vicious, who throw stones, and break windows without fully under-

standing what they are doing, who hide their actions and let people think that they have not moved, *without any other motive than a wish to deceive.*

Therefore all hauntings accompanied with a displacement of things must be subjected to the severest criticism, the rather that when such strict scrutiny has been made, the miracles, with some few exceptions, have evaporated.

Nevertheless, despite our scepticism, which is considerable, there remain some facts, infrequent, but too clear to make it possible to deny them real objectivity.

I will give in the first place a somewhat detailed account of the events that came to pass at the chateau of T., in Normandy, near Caen. M. de X. noted down day by day all that happened, and his diary was communicated to M. J. Morice, doctor of laws, who published it in the *Annales de Sciences Psychiques,* 1892, 212-213, and 1893, 65-90.

M. de X. inherited, in 1867, a house that passed as being haunted. In 1868 there were abnormal noises, which ceased, but were resumed more vigorously in 1875. From the 13th of October, 1875, to the 30th of January, 1876—that is, for over three months —abnormal noises, sometimes very loud, continued to be heard. M. de X. took every precaution not to be tricked. He always kept his revolver handy and it was well known that he would not hesitate to use it. On one occasion a friend of M. de X., hearing in the night noises in his room, fired several times by guess; the bullets were found in the wall. The cellars and the walls were carefully searched; two formidable watch-dogs were loosed every night. There was no possible doubt of the objectivity of the noises, heard sometimes by twelve persons who composed the entire *personnel* of the chateau. There was certainly no imposture on the part of the servants, for they were all terrified and gathered together; and when *all* were thus assembled, the phenomena were sometimes loudest.

Moreover, in certain cases, the fraud of one servant would not have produced the results. Extremely violent knocks were heard in one part of the house, and one second later, in another part.

One day Mme. de X., hearing a noise, came out to investigate. Before she touched the door, *she saw* the key turn quickly in the lock, come away, and strike her left hand. The Abbé Z., tutor to her young son, witnessed this. I copy from the diary of M. de X. relative to the events of the 25-26th of January (p. 75):

"One o'clock. Twelve blows followed by a long drumming, then thirty rapid single knocks, one would have thought that the house was shaken; we were rocked in our beds on every story . . . then a long rush of feet; the whole lasting only five minutes. A minute later the whole house was shaken again from top to bottom; ten tremendous blows on the door of the green room. Twelve cries outside, three bellowings, followed by furious outcries. Very loud drumming in the vestibule, rhythmical, up to fifty knocks. 1.30 A.M. The house shaken twenty times; strokes so quick that they could not be counted. Walls and furniture alike quivered; nine heavy blows on the door of the green room, a drumming accompanied by heavy blows. At this moment bellowings like those of a bull were heard, followed by wild non-human cries in the corridor. We rang up all the servants and when all were up we again heard two bellowings and one cry."

Several priests were then called upon for ritual exorcism. The phenomena diminished but did not entirely cease.

I do not know what became of the chateau T. in the sequel. The story is disturbing; a prolonged and violent mystification by the servants of M. de X., by his young son, or by the tutor would seem nearly impossible as an explanation of all that took place.

C. Lombroso (*Ricerche sui fenomeni spiritici,* Turin, 1909, 247) tells the story of a certain hostelry of Turin where very violent noises occurred, especially breakages of bottles and crockery. Chairs were broken noisily; objects suspended from the walls fell to the ground. Lombroso himself, by the light of a candle, saw bottles roll on the ground before him and finally smash. He made sure that there were no strings to move them. One day when glasses and plates had been set on the table for dinner, the whole were broken and dinner had to be served in another room. In full light at 8 A.M. objects flew through the air, going into the next room and breaking at the feet of two travellers who had come to the hostelry. A bottle of soda-water, in full daylight and under the eyes of several persons, moved through the air four to five yards, slowly as if held by a hand; finally it fell to the ground and burst.

It seems that these phenomena were connected with the presence of a boy of thirteen; for when he had been sent away all the phenomena ceased.

This, however, in no way implies that there was trickery. It is extremely probable that there are mediums who do not know

themselves to be such, and produce telekinetic phenomena by the mere fact of their presence, quite apart from any experimental intention. Many so-called haunted houses are not haunted at all; they are inhabited by mediums unconscious of their powers.

A very singular case has been narrated by Major B. Moor of the Royal Society of London (I have not been able to consult his book, *Bealings Bells*) and give the details from Bozzano (p. 164):

On the 2d of February, 1834, the bells of his house in Ipswich began to ring loudly during the day without any apparent cause. This continued for fifty-three days. They were not electric bells. Sometimes the whole twelve bells of the house rang together, even those whose bell-pulls were completely visible except where the wires entered the walls. Mr. Moor often tried to ring the bells equally loudly by pulling the cord as strongly as possible but could never equal the extraordinary violence in the other case. "When we pulled the bell," says Mr. Moor, "its movement was slow and quite visible; but when moved by an occult power the movement was so rapid that nothing could be seen." This was verified by more than twelve persons, so that the hypothesis of hallucination will not hold. Sometimes the bells rang when there was no one in the house. Major Moor concludes definitely that the movement was due to no human cause.

He wrote to various persons to ascertain whether similar phenomena had been observed before, and obtained many answers. He collected fourteen similar cases, of which Bozzano quotes only that of Mrs. Milnes, who, at 4.30 P.M., in her house at Westminster, found all her family alarmed. The bells rang with such energy that the servants and children were terrified. Mr. Milnes, on arriving at the house, examined everything minutely and watched all the wires. The ringing continued furiously for two hours and a half.

In connection with bells, the still more doubtful case given below may be mentioned:

The two women, Mme. Martillet and Mme. Claudet, who nursed Alfred de Musset in his last illness, say that as he lay in his armchair they saw by the light of the lamp that he was looking at the bell near the mantelpiece. But he was so feeble that he could not rise. "At that moment," says Mme. Martillet, "we were surprised and frightened; the bell-pull that the sick man had not reached, moved, as if by an invisible hand, and my sister and I took each other's hands saying, 'Did you hear? Did you see? He did not

leave his chair. . . .' The servant came, having heard the bell" (Lefèvre, *Musset sensitif, A. S. P.,* 1899, 106).

Should the singular phenomena mentioned in all ages as accompanying a death or serious event be considered as akin to hauntings? There are legends of clocks stopping, pictures falling, some object noisily breaking, etc., but it is difficult to determine the part played by chance coincidence.

Cheiro (Count Hamon) says that on Monday, June 5, 1915, as he was sitting chatting with two friends in his country house at 8 o'clock in the evening, some heavy object fell with a crash in the adjoining room; it was a large oaken shield bearing the arms of Great Britain that had been broken by the fall. The fracture was in the part representing England and Ireland; and Cheiro said, "there has doubtless been some naval disaster in which Ireland is concerned." At that very time Lord Kitchener, an Irishman, perished in the *Hampshire* (*A. S. P.,* July, 1916, 122). It is needless to criticize; this is mere coincidence, and not very cogent.

Aksakoff (*Animisme et Spiritisme,* 1895, 286) cites various cases of *persecution* much resembling hauntings; but his observations must be taken with some reserve; his credulity is no more to be doubted than his honesty.

The case of the Rev. Mr. Shelp related by Mr. Capron (*Modern Spiritualism*) is very open to suspicion; for it does not seem certain that Mr. Shelp took all the necessary measures to ensure that his son, aged eleven, was not the voluntary agent in the phenomena. Chairs rose in the air and fell with crashes, a chandelier was taken from the mantelpiece, knocked against the ceiling several times, and broke; a brush was thrown through the window; a glass left the worktable and broke the last pane left intact; garments moved about the room, inflated as if to resemble human figures (!!). As Dr. Shelp and his son Harry were out driving sixteen stones as large as eggs were thrown into the carriage.

Aksakoff's other story of persecution is more interesting, and seems to have been carefully observed by M. Schtcharoff (against whom the persecution seems to have been directed) and by M. Akoutine, chemical engineer of Orenburg. The medium was probably M. Schtcharoff's wife, unknown to herself. Akoutine tried to divide the phenomena into those of attraction and repulsion, but no law could be discovered. Sometimes things flew from

the table at which people were sitting; at other times, when a cupboard was opened, the things would fall on Mme. S., moving to a greater distance afterwards. These improbable facts were repeated during several months, sometimes very energetically. A sofa weighing one hundred and eighty to two hundred pounds on which Mme. S.'s mother was reclining began to dance, raising itself into space with the lady (!). Garments often took fire in a way that could not be explained and some very strange facts are related by M. S., who discusses very coolly whether there can be hallucination on his own part or trickery by his wife; and concludes in the negative in both cases. We shall be still more prudent, and conclude (always provisionally) with a large note of interrogation.

We can draw no other conclusion from the case of Lillian F. (Carrington, *The Problems of Psychical Science,* London, 1914, p. 341.) In the various houses in which she lived, she had to endure real hauntings from her childhood onwards. In an old house at Memphis (Tenn.) doors opened; there were knockings on the windows, on the mirrors, and on the beds. Heavy steps were heard in the hall. Lillian and her mother both heard these noises and were terrified by them. In Maryland similar phenomena testified to by other persons than Lillian F., as also at Lafayette Street (Baltimore), Memphis, Maryland, and New York.

Miss Mary Savage, on retiring to rest, heard knocks on the bed, soon becoming very loud and seeming to move round her in circles. Her friend, Miss Sarah Soothywoode, who was in the next room, heard "a tremendous noise"; so hallucination cannot be accepted as an explanation (Carrington, p. 288).

Ada Sinclair reported phenomena of telekinesis and haunting the details of which are of interest. They are not to be classed as entirely accidental since they occurred in connection with experiments in spiritist rapping-messages. Mrs. L., a friend of Ada Sinclair, was present. Objects were plucked off the wall and projected violently. A porcelain vase was thrown to the ground and broken. On other occasions, in presence of several persons, small articles such as pins and matches were moved; the pins being stuck into walls and clothes. The phenomena were strongest when Mrs. L. was present, but they did not cease when she had gone into the next room (Carrington, p. 306).

The Count de Larmandie has published an account of haunting in his chateau at Sudrie. A piece of wood lying in the corner of a

room struck the ceiling and fell at the feet of the count and his sister. It bounded about several times, striking the door, the floor, and the walls. All this in full daylight. When the count or his sisters entered the haunted rooms, there was a hail of little stones (A. Erny, *Le Psychisme expérimental*).

The following fact was not told till forty years after its occurrence, but is quite clear in the memory of the narrator, M. Kouprejanoff, on the superior staff of the Ministry of Public Instruction in Russia. When a young boy, he and his mother and sisters heard logs falling in the shed where they had been placed. They all went to see, taking a lantern and three candles. Twelve persons in succession came to look in the locked shed and saw the logs thrown against the wall, then fall to the ground one after another at short intervals. This lasted close on forty minutes; and the logs came from the middle of the stack, though even a strong man could not have taken them from the lower part of the pile (*A. S. P.*, 1899, ix, 174). But what conclusions can be based on a story written forty years after the event?

Mr. Bristow was working with two comrades in a carpenter's shop. One of the two then accused him of throwing a bit of wood at him, which Mr. Bristow denied. Other pieces were thrown, striking all those present. Nothing could come from outside, for the shutters were not moved and were thickly covered with dust. More than this, Mr. Bristow saw a piece of wood, two fingers wide, come jumping towards him, make a bound of two feet and hit his ear. "A piece of wood lying on the ground jumped into the air, and began to dance among our tools, but when we tried to catch them they evaded our hands. Sometimes they moved about in the air with a waving movement."

These phenomena went on for six weeks and were testified to by several persons; the bits of wood seemed living and intelligent: they arranged themselves in a pile in one corner of the workshop. They moved most when not looked at; and despite the speed with which they were projected into the air, describing complicated circles and spirals, they fell without noise (*P. S. P. R.*, vii, 383; Bozzano, 186).

Mrs. H. E. Sidgwick and F. Myers analyzed this case with the greatest care and obtained detailed explanations from Mr. Bristow: they connect this haunting with a certain John Gray, a nephew of the proprietor of the workshop, who had not paid his creditors. His uncle, also named John Gray, had not paid them

either. As soon as he had paid his nephew's debts the manifestations ceased.

This case is complex and hard to interpret; and though very difficult to accept, it is almost as difficult to reject the formal depositions of Mr. Bristow and his companions.

At Absie (Deux-Sèvres) in 1867, according to the police reports (*A. S. P.*, 1905, 86), there was a hail of stones in an unoccupied house. The reports referred to would seem to have been destroyed. No fraud could be discovered. Constable Mousset testified: (1) that the stones fell without doing any harm; (2) that a glass lamp was knocked from the table to the floor by a large stone without being broken; (3) that the stones fell in all directions and were only seen when they rolled on the ground; (4), that the stones continued to be heaped up in the room even when some one was standing at the chimney-piece to observe and there was not the smallest hole in the walls or the windows.

But Mousset's evidence is quite insufficient.

Similarly with the case of Oels (Pomerania). The lights, noises, and phantasmal appearance are testified to by various persons (1916), but after enquiry, a magistrate concluded that they were natural facts due to the conscious or unconscious trickery of children in the house (*Psych. Studien,* xlvi, 1919, 84; 140). The assertions of Bohn were, however, vigorously combated by Derter (*Das Geheimnis des Spukhausen in Oels im Lichte des Uebersinnlichen* (*A. S. P.*, 1895, v, 94).

At Niedelsdorf in Switzerland, M. Joller, a national councillor, relates that for twelve days from the 15th to the 27th of August, 1862, mysterious happenings took place at his house. Tables and chairs were upset; heavy hammer-strokes shook the house; objects were taken from the walls, latches were broken off, pictures were reversed on the walls *"under our very eyes"*; stones were thrown from all sides despite locks and bolts. These strange things went on for six weeks in full daylight. There were also inarticulate noises, melodies, singing, noises of splitting wood, of counting money, and winding a watch. All these facts are described by M. Perty, a professor in the University of Berne (*Die mystischen Erscheinungen der menschlichen Natur*).

The facts observed by Hector Durville with Raymond Charrier, aged fourteen, at Saint-Sauveur, Yonne, are parallel with the phenomena of hauntings. The usual phenomena are all there—objects projected in the room, mattress and bedclothes thrown on

the ground, shoes thrown about. One day at breakfast things were thrown at sitters from all parts of the room. M. Durville took Raymond to his own house at Montmorency. Pamphlets, books, kitchen utensils, and all kinds of objects were projected from all sides. Raymond went out of the room and was already in the passage, when Mr. Durville's walking-stick came off the peg where it was hanging, and was flung after Raymond and fell behind him (*A. S. P.*, 1910, xxi, 116-124).

That such things should happen without Raymond having been caught in the act implies either that they are true or that M. Durville was blind. Nevertheless, he adds the serious remark, "I have never seen any phenomena produced in entirety under my eyes." The whole responsibility for the assertions rests with M. Durville, for there is no other witness to them.

Mr. J. Proctor noted in his diary all the phenomena that occurred in a certain house abandoned because of the strange and disagreeable facts that took place there. As soon as Mr. Proctor took up his abode there, noises, cries, and footsteps were heard which other lodgers could perceive. Two months later, a figure appeared at a window; on another evening the caretaker, his wife, and his daughter saw a priest wearing a stole, who appeared for ten minutes. Knocks were then heard, and were continued for six months at intervals. One night a friend of Mr. Proctor's got up, being frightened by the sight of a phantom and by terrific noises. Invisible beings called lodgers by name. New tenants suffered in the same manner by noises and phantoms and the owners had to give up letting the house (*A. S. P.*, December, 1892, and Lombroso, 259).

Phenomena of haunting would seem to have occurred in the military school at Ypanema (Brazil) in May, 1914. Plates, cups, and saucers were flung about as by an invisible hand. This was verified, says the *Diario de Sorocaba,* by all the officers and the colonel commanding the school. The phenomena were, however, of brief duration; a scientific committee saw nothing and could verify nothing; the facts therefore remain very doubtful (*A. S. P.*, April, 1916, 70-72).

A question arises, interesting from a practical point of view. It is discussed with documentary evidences by Zingaropoli (*Case infestate dagli Spiriti,* Naples, 1917): "Does haunting confer a right to the cancellation of a lease?"

The Parliament of Bordeaux formally decided that it does. In

our own day there have been several lawsuits over this—in 1915 at Altavilla (Italy); in 1907 at Naples; in 1896 also at Naples; in 1907 at Egham (England). In the latter case the house had been hired by Mr. Stephen Philips, a well-known dramatic author and poet. He complained that during the night heavy knocks shook the walls and doors, and figures appeared on the stairs and in the passages. The house had already been said to be haunted. The *Daily Mail* and *Light* which had spoken of these facts were sued and fined for depreciating the value of the house; though the sentence was reversed on appeal, the newspapers proving that the hauntings were matter of public notoriety.

At Ancona in 1903 the public prosecutor, M. Marracino, states that he and his two sons who are barristers, witnessed singular facts connected with jets of liquid. During the night hats were filled with water; during the day water was thrown on the beds. The walls were examined by engineers who discovered nothing unusual. Milk, wine, and coffee were spilt on the floors. In a locked buffet objects were displaced. It seems that the phenomena were due to the young daughter of M. Marracino who was a medium unknown to herself. One day a book rose up and touched her on the shoulder. (*Si sollevo e ando a battere sulla spalla di lei, quindi, cadde a terra e cominci a saltarellare* (!!) *comme mosso da una forza impulsiva, percorse sei o sette volte la camera e, alzandozi di nuovo, ando ad applicicarsi al muro.*)

In such cases when the phenomenon is due to a medium who is not aware of the fact (usually a very young child) fraud is often mingled with the phenomena. Maxwell says, with good reason (*Bull. de l'Inst. Psych.*, 1905, 376), that at first there are doubtless genuine phenomena that lead the child to simulate them later on. The unstable mentality of mediums explains this fraud, the more readily that they scarcely know how to distinguish voluntary from involuntary acts: the uncertain state of their consciousness deprives them to a considerable degree of their sense of responsibility.

Kerner observed with the Seeress of Prévorst many mediumistic phenomena that entirely resemble those in haunted houses from which it is difficult to dissociate them. They constitute an abnormal whole that borders on the pathological; hypnotism, lethargy, cryptesthesia, premonitions, experimental telekinesis, and such telekinesis as occurs in haunted houses. Kerner says, "There were knocks and noises like stones thrown, once a table moved

jerkily across the room without any visible contact, tin plates were thrown across the kitchen. These stories would have provoked in me a pitiful smile had I not been an ocular witness to the facts." However improbable they may seem, I think it rash to deny them; we do not understand them and cannot explain them, we can only take note of them.

Dr. Hart Raines (quoted by Barrett, *P. S. P. R.*, 1911, xxv, 404) mentions a very curious case. In January, 1911, three young men were sent to a small telegraphic station at Dale in Georgia, and took possession of their new domicile. Shortly afterwards they found that they could not keep the door shut; it opened despite all their efforts, nails and iron bars were of no use. Stones and other things were thrown into the room; a box of condensed milk rose into the air and passed into the room untouched by anyone; a lantern also rose up and was broken against the wall; a chair was thrown from before the window with such force that it was broken. The three young men were panic-stricken. "One of them walked several miles to the nearest town to resign his position, and he assured Dr. Raines nothing would induce him again to go through the experience he had suffered."

Mr. Murphy, hearing that a house at Enniscorthy (Ireland) was said to be haunted went with Mr. Owen Devereux to pass a night there in the same room with the two young men who lived in the house. It seems that one of them, Mr. Randall, was the agent, for most of the movements of objects and noises took place round him. During the night that Mr. Murphy passed there, repeated noises, becoming more and more rapid, took place, and then Randall's clothes were taken off him. He cried out, "Hold them, hold them, they are taken off me!" and added, "I cannot hold them; they are going, and I am going with them, there is something pushing me from inside, I am going, I am going, I'm gone!" A light was struck and Randall was seen to be in great terror and bathed in sweat. Randall, in the absence of Murphy, had felt strange phenomena, and likewise his room-mate, Mr. Sinnett. After having heard all night the sound of hurried footsteps, they lit the lamp, and then "what added to our fright," he says, "was a chair dancing (!) in the middle of the floor without a thing near it." His bed and Sinnett's were raised into the air! (*P. S. P. R.*, xxv, 1911, 380).

After Randall had left the house, nothing further occurred to him. It seems therefore that the phenomena could only be pro-

duced in a given locality and with a certain person. It would be important to know what degree of confidence can be placed in Randall, and up to what point he was normal.

In the same issue (*P. S. P. R.*, p. 397) Sir William Barrett gives a methodical investigation of some other phenomena, which, though of but moderate intensity, derive interest from his testimony. He passed several nights in a haunted house at Derrygonnelly in Ireland about nine miles from Enniskillen. The phenomena seem to have been associated with Maggie, a girl of twenty, the daughter of Jack Flanigan, the owner of the house. When everybody was still, loud noises were heard on the walls, on the bedsteads, and on the doors. A large shovel fell on the bed and Sir William heard hammer-blows. He verified that these were intelligent; four times he got an exact answer to a number (between 1 and 10) which he mentally asked (probability 1 to 10,000).

The following case is remarkable from several points of view. The phenomena took place at Portland (Oregon) at the house of Mr. and Mrs. Savoyer, living at 546 Marshall Street with their grandson Elwin March, aged eleven. Two medical men and many other persons saw with their own eyes movements of heavy objects without contact. Chairs and telephones were displaced in open day, no one being near them. Nevertheless there is no doubt that the boy lent himself to these games. Dr. Gilbert of Portland got him to avow that he had played many tricks. A severe investigation seems to have proved that the trickery only began later and that some of the movements took place when March was not in the room. There is no incongruity in admitting the genuineness of the earlier phenomena and also young March's trickery, made possible when his movements were not watched. But however that may be, the fact of fraud, even subsequent fraud, makes the whole doubtful. Maxwell, who has studied deeply some of these phenomena, considers, I think correctly, that at the outset the telekinesis is real, but that the medium who at first produced them spontaneously simulates them afterwards. The story is given in *Am. J. S. P. R.*, November, 1910.

Grasset (p. 396) verified, with Dr. Calmette, that the extraordinary displacements observed in a so-called haunted house ceased completely when the medium, a hysterical girl of fifteen, was sent for treatment to the hospital at Saint-Eloi (Montpellier).

In the *A. S. P.* (1919, xxix, p. 96) there is a story of extraor-

dinary facts testified to by a Mr. X. and his nephew, two artists whose honour and good faith are not in doubt. Objects moved by themselves, metal boxes knocked together, furniture moved, nails drew out from the walls, pincers were heard mounting the stairs. This was in the department, Maine-et Loire and Sarthe. At Cannes a still more astounding thing came to pass: "A little man, formed like a key, a head of hair taking the place of the key-ring, appeared in the room . . . he came on the marble top of our night-table and seemed to sit down on it; when we tried to catch him he dodged as quickly as a mouse. On the next day this little sprite wore a blue costume with white spots. He always came to visit us, appearing from the radiator" (!!).

It is impossible to put any faith in these stories that Mr. X. and his nephew have illustrated with sketches more extravagant than anything in the *Thousand and One Nights*. Still, in matters metapsychic, so many strange phenomena have been denied and afterwards found to be true, that though I greatly desire formally to deny these insanities, I feel constrained to make some timid reserves in my bold denial.

The following incident took place in the jungle of Sumatra (*J. S. P. R.*, May, 1906, xii, 261). Mr. Grottendieck, alone with his native boy in a tent, was awakened by noises of stones falling round him. He lit his lamp and waked his boy who was sound asleep, and told him to find out the trickster or enemy. While the boy was outside, the stones continued to fall. He saw them slowly follow a parabolic course. He tried in vain to stop them; they avoided his hand. The boy came back saying there was no one, but the stones continued to fall. Mr. Grottendieck then fired five shots from his carbine from the window, but the stones still came. The servant was so frightened that he ran away into the jungle.

In a later letter Mr. Grottendieck says he is absolutely sure that his boy did not throw the stones; but is inclined to think that the slowness of their fall was an illusion, a mere semblance; for he says while the phenomenon took place, time seemed to be slowed down. "I feel now inclined to suggest that there might have been something abnormal in my own condition at the time."

This is highly probable, sufficiently so to deprive his testimony of all value.

I might multiply these poltergeist cases by citing many facts new and old, from many authors; but those I have given will suffice to show how obscure the matter still is. Before giving my personal opinion I will state in an abridged form the conclusions arrived at by Professor Barrett in his excellent article on haunted houses and *poltergeists* (*P. S. P. R.*, xxv, 1911, 377):

1. Fraud and hallucination are not sufficient explanations of all the phenomena.

2. The noises, movements of objects, and other physical effects seem to be connected with an invisible intelligence, which, for all its imperfection, has some resemblance to human intelligence.

3. The phenomena are usually associated with a place or a person, so that some kind of fulcrum seems necessary to their production.

4. The phenomena are sporadic and temporary, lasting from a few days to a few months, beginning and ceasing without any known cause.

4. *Conclusions*

Before all things it is necessary to know if the facts are genuine; in presence of such extravagant phenomena theoretical discussions are of minor importance.

The testimonies are too precise for it to be possible to deny *everything*. Many of these cases, even when severely examined, establish that there have been movements of objects without contact, and more especially noises that no ordinary mechanical cause can explain. Is it not absurd to suppose that for weeks and months cool-headed and responsible persons, closely watching the so-called haunted house, have seen things that did not exist and heard loud and terrifying noises produced by no living being? If there were but one such case, and one such person, illusion or hallucination might be invoked; but that is a childish explanation. People say "hallucination" to dismiss a disquieting fact by a convenient word; this is much too simple.

Collective hallucination is next advanced. But in this sense there are no collective hallucinations. Alienists do not know of any such phenomena.

I am aware that hysterics in a convent have often told wonderful stories of what one and another claim to have seen; I know, too, that the inventions of myth-making hysterics have a large

place in their psychology, but these witnesses are neither nuns nor hysterics.

It may be best to limit the recognized facts of haunting to accidental telekinesis.

Experimental telekinesis has been amply proved: then why not admit that the phenomena in haunted houses are of the same order, and that they are accidental phenomena of the same kind? That makes them neither more nor less mysterious.

The striking similarity of the facts verified in Normandy, in Ireland, in Scotland, in Georgia, in Russia, in Italy, and in Sicily shows that even these unusual facts show definite sequences. If they were purely fanciful the accounts would not be thus concordant.

In fact, all these matters belong to metapsychics. Formerly, from 1885 to 1895, the members of the S. P. R. were inclined to accept only telepathy as demonstrated and to deny clairvoyance (non-telepathic cryptesthesia) and also all physical phenomena. Podmore in particular reached the conclusion that there was nothing genuine but telepathy. But little by little our learned colleagues of the S. P. R. have had to admit clairvoyance and physical phenomena. Short of wilful blindness, how can the facts produced by Home and Eusapia be denied?

Therefore, as experimental telekinesis is proved, accidental telekinesis must be admitted as being at least possible.

The principal objection advanced against accidental telekinesis is not hallucination but trickery. It is said that when there are strange noises and displacements of objects, these are due to the pranks of some vicious and malicious child who amuses himself by practising on the curiosity of observers. But only in exceptional cases can this hypothesis hold, for in most cases distrust was intense and progressive.[1]

I remember once being asked the naïve question, "Have you thought that you may have been hoaxed?" This fear has been my chief, or even my only, anxiety throughout my experiments; and I cannot imagine that in a haunted house, when strident noises and cries are heard, when doors open and shut, that the sole concern of straightforward and sensible persons should not be to find out whether they are being hoaxed by some practical joker or some

[1]The justifiable severity shown in investigation can be seen by reading F. Podmore's criticism (*P. S. P. R.*, xv, 98) of the book, *The Alleged Haunting of B. house,* Redway, 1899, by Miss Goodrich Freer and the Marquis of Bute.

rogue who wants to rob them. Hallucination and trickery are two hypotheses that are the refuge of those who do not wish to admit the facts; for no one *wishes* to admit them, and we naturally refuse to accept an unusual phenomenon. Nevertheless the unusual does occur. Once the facts are admitted, the next thing is to explain them; but their very strangeness defeats our endeavours.

When a phantom appears it seems natural to connect the fact with some old tragedy, or even with an apprehension of death that has survived its event. One is tempted to suppose an intention of the deceased to prove his presence. This, however, is probably a narrowly anthropomorphic notion; and rather than suppose the problematical survival of a human consciousness and vague symbolism of human intentions, I prefer to say without false shame that *I do not understand*. I therefore prefer to remain undecided, remarking that my indecision is not directed to the facts, but only to their explanation.

The stone-throwing, broken crockery, banging doors, and terrifying cries are all so absurd, from the human point of view, that the hypothesis of intention in the forces that produce this upset of domestic objects is ridiculous and deserves no further consideration.

All hypotheses apart, the facts that emerge from a study of hauntings may be summed up as follows:

1. In some places phantoms appear, sometimes to several persons in succession, sometimes collectively, keeping the same form for weeks, or even months together. This affirmation is not yet fully established and some scientific doubt is necessary.

2. In certain houses, usually without any phantom being perceptible, there are noises and movements of objects that cannot be explained rationally. Most frequently these phenomena are dependent upon some person who, perhaps without knowing or willing it, plays the part of medium. Just as a medium in a spiritist séance causes displacements of chairs and musical boxes, so mediums (who do not know themselves to be such) cause stones to fall and violent blows to be struck on the walls.

This second statement seems to me impossible to dispute.

In other words most phenomena of haunting are due to spontaneous telekinesis; but just because experimental telekinesis rests on indisputable proofs, for the same reason should spontaneous telekinesis, which rests on relatively infrequent and frail testi-

mony, be subject to rigid criticism. The phenomena of haunting cannot be denied; we must even admit that they are very probably true. But to say that they are probably true is to say that they are not certain. Of all metapsychic phenomena these are the most questionable.

We might even feel constrained to deny them resolutely were it not that they are buttressed by the absolutely certain facts of ectoplasms, premonitions, telekinesis, and monitions.

BOOK IV

Conclusion

I

I have now reached the end of this long investigation. I have endeavoured, while giving a place, possibly too large a place, to my own researches, to collect the documentary evidence very widely scattered in many records, and to put some order into a matter which up to the present has never been synthetically studied. I have tried to extricate the sciences anathematized as occult from the chaos in which they were involved, and to put in a clear light knowledge that official science, in the pride of its reputation, has refused to consider. It has seemed to me that the time has come to claim for metapsychics a place among recognized sciences by making it conform to the rigour and the logical treatment which have given them their authority

Scientific men will be surprised, and perhaps indignant. But if they have the wisdom—the elementary wisdom, as it seems to me —to consent to read this long and laborious study, they will be obliged to give way before the evidence.

My intention will be evident from the contents of the book. I have desired, while eliminating as far as possible everything notoriously uncertain, and expressly stating my doubts as to certain experiments, to present facts and observations, for these are the foundation of every science.

Finally, it has appeared to me, as it will doubtless appear to every impartial reader, that there are too many well-verified facts and rigorously conducted experiments that chance, illusion, or fraud should always be attributed to all these facts and experiments without exception.

But as the facts are very strange and the experiments seem to clash so often with current scientific dogmas, the affirmations made will give rise to strongly adverse criticism and to mocking incredulity. This is the lot of all new ideas, and it moves me not at

all. I only hope, and surely this is not asking too much, that I shall not be condemned unread. No one can form a serious and considered opinion worthy of respect by casually turning over the leaves of a book that sums up the labours of two hundred honest and skilful workers. I would like to say to my critics, as did Themistocles, "Strike, but listen."

It troubles me more than in the camp of those who are not sceptical I shall meet with very strong opposition. On the one hand I have been willing to narrate many surprising facts admitted by spiritualists, and on the other hand I have not felt able to adopt their theories; for I have always sought to plant my feet firmly on the earth and have preferred a rationalist explanation even when it seems improbable. And, frankly, my position causes me some pain.

In very many cases the spiritist hypothesis is obviously absurd —absurd because it is superfluous—and again absurd because it assumes that human beings of very moderate intelligence survive the destruction of the brain. All the same, in certain cases—rare indeed, but whose significance I do not disguise—there are, apparently at least, intelligent and reasoned intentions, forces, and wills in the phenomena produced; and the power has all the character of extraneous energy (see p. 352, children's death-beds).

In these cases the spiritualist explanation is much the simplest; or, if some will not hear of that, the hypothesis that there are intelligent beings that interpose in our lives and can exercise some power over matter.

I do not seek to attenuate the bearing of these facts; but I cannot adopt the inference that there are spirits—intelligences outside human intelligence. My inference is a different one; it is that *the human personality has both material and psychological powers that we do not know.*

And as this hypothesis by no means satisfies me, I will add, as a final remark, that in our present state of knowledge we are not in a position to understand.

II

Our evolution takes place in the midst of the unknown; but nevertheless two leading facts have been placed beyond doubt:

1. The human mind has other sources of cognition than the normal senses—cryptesthesia.

2. There are materializations—powers that, emerging from the body, can take form and act as if they were material bodies—ectoplasms.

It seems to me that we can go no farther than cryptesthesia and ectoplasms without being lost in mists.

What amazing stories I have heard, told me by witnesses of unquestionable good faith! But they had observed with greater enthusiasm than critical accuracy, and when the matter concerns highly improbable facts we cannot be satisfied with half proofs, with experiments that are *almost* conclusive, or inferences that are *nearly* certain. I have not included these allegations in my book, even when I have reason to think them not unfounded. I have not busied myself with problematical narratives, so that while some may think me too credulous, many will think me too severely critical.

Movement without contact, clairvoyance, phantoms, and premonitions are so very unusual that when we first hear of them we are inclined to laugh at them. Till we have studied them we laugh and deny. This was my state of mind for a very long time as it was that of Crookes, Lombroso, Russel Wallace, Zöllner, Oliver Lodge, Morselli, and Bottazzi, and I shall therefore be in no way surprised should my account of parallel facts provoke incredulity and mockery. The less attention is given to reading, the greater will be the disposition to ridicule.

Moreover, it is not argument that will bring conviction. Even severe mathematical demonstration does not always convince. *We must be accustomed to a phenomenon before we can accept it.*[1]

III

Perhaps—and I admit it—the innumerable experiments published by eminent men of science would not have convinced me, had I not been a witness of the four fundamental facts of metapsychics. I was an unwilling witness, in no way enthusiastic, very critical, extremely distrustful of the facts that forced themselves upon me. I was able to verify, under unexceptionable conditions

[1]M. Thiers, ex-president of the French Parliament, having determined to acquire a knowledge of mathematics in his old age, rebelled when his teacher showed him that the section of any cone at any angle with the axis showed a regular ellipse. "Not possible," he said. "When a sugar-loaf is cut obliquely, there must be a big and a little end." Not till an actual sugar-loaf had been brought and cut would he admit conviction.

and despite my desire to disprove them, the four essential facts of metapsychics.

These four personal experiences, all four of which carry obvious proof, determined my belief, and that not at once, but after long consideration, meditation, and repetition:

A. Cryptesthesia. Stella, in presence of G., whose family she does not and *cannot* have known, gave the first names of his son, of his wife, of a deceased brother, of a living brother, of his father-in-law, and of the locality where he lived as a child.

B. Telekinesis. While Eusapia's head and hands were held, a large melon weighing six pounds was moved from the sideboard to the table, the distance between them being over a yard.

C. Ectoplasms. Eusapia was in half light, her left hand in my right and her right in my left tightly held, and before Lodge, Myers, and Ochorowicz, a *third* hand stroked my face, pinched my nose, pulled my hair, and gave a smack on my shoulder heard by Ochorowicz, Myers, and Lodge.

D. Premonitions. Alice, at 2 P.M. told me, for the first and only time, that I should soon give way to violent anger before one, two, three persons whom she designated with her hand as if she saw them. At 6 P.M. the unlikely and unforeseeable impertinence of a person absolutely unknown to Alice provoked me to one of the strongest and most justifiable fits of anger of my whole life before two other persons, an anger that led to my receiving a challenge to a duel, the only one I have ever received.

These four experiences, by their precision and faultlessness, sufficed, if not to produce conviction, at least the beginnings of conviction. As will be obvious, from reading the book, I have had many other proofs, but in this summary I mention only one of the most characteristic of each kind.

IV

These four personal experiences amount to nothing, just nothing, compared with the multiple proofs that other men of science have brought forward. An edifice cannot be built on four little stones, however solid they may be; and the reader who has not, like me, had the happy opportunity of similar experiences will require proofs, if not stronger, at any rate more numerous, and will need other testimony than mine.

Testimony is abundant and proofs innumerable. Decisive

proofs are repeated daily. In this book, which is a collection of facts rather than an exposition of doctrine, I have intentionally multiplied instances at the risk of producing weariness and boredom. The authority of the witnesses and the mass of repeated proofs are such that doubt is not warranted. Cryptesthesia, telekinesis, ectoplasms, and premonition seem to me founded on granite; that is to say, on hundreds of exact observations and hundreds of rigorous experiments. The thing is a certainty; and even though among these thousands of observations there may be defects, gaps, errors, and illusions, sometimes mistakes of testimony, occasionally trickeries, more often casual coincidence, still more often ill-considered assertions, still the thing is certain. It is not possible that all these observers should never have made mistakes, but the whole constitutes a sheaf of testimony so large and homogeneous, that no criticism of details, however acute, will be able to disintegrate and disperse.

Therefore:

1. There is in us a faculty of cognition that differs radically from the usual sensorial faculties (Cryptesthesia).

2. There are, even in full light, movements of objects without contact (Telekinesis).

3. Hands, bodies, and objects seem to take shape in their entirety from a cloud and take all the semblance of life (Ectoplasms).

4. There occur premonitions that can be explained neither by chance nor perspicacity, and are sometimes verified in minute detail. Such are my firm and explicit conclusions. I cannot go beyond them.

V

Thus it seems to me that the general conclusions of metapsychics are rigorously true. I even go so far as to think that many phenomena indicated in this book as still doubtful (for when proof has seemed to me less than rigorous I have suspected and gone near to denying them) may soon be recognized as authentic. Metapsychic science will go much farther than I have ventured to think. I have wished to err on the side of prudence, accepting only that which has been proved, and well proved, twenty times or more. Official scientists will certainly find me too credulous; still more certainly spiritualists and occultists will find me terribly sceptical.

To imagine that all metapsychics are but illusion is to suppose that William Crookes, A. R. Wallace, Lombroso, Zöllner, F. W. H. Myers, Oliver Lodge, Aksakoff, J. Ochorowicz, J. Maxwell, Boutleroff, Du Prel, William James, Morselli, Bottazzi, Bozzano, Flammarion, A. de Rochas, A. de Gramont, Schrenck-Notzing, and William Barrett were all, without exception, liars or imbeciles; it is to suppose that two hundred distinguished observers less eminent, perhaps, but persons of high and acute intelligence, were also liars or imbeciles.

VI

Why should men of science, whether mathematicians, chemists, or physiologists, oppose cryptesthesia and ectoplasms? Are these new facts in contradiction with the old facts?

I lay stress on this, because men do not distinguish sufficiently between a contradiction and a new affirmation.

Nothing in metapsychics is in contradiction with official science; but there are new affirmations.

Psycho-physiology teaches that cognizance of things reaches us through our senses; that if the retina is excited there is a visual sensation; if Corti's membrane, an auditive one. But psycho-physiology has never attempted to demonstrate, and could never demonstrate, that no other (unusual) channels of cognition can exist. It would be a contradiction to say that excitation of the retina does not produce a visual image, but it is not a contradiction to maintain that there may be a visual image without retinal excitation.

In other words, Science establishes positive facts, and there she is all-powerful. She is not, however, justified in formulating one single negation, for at every moment she is confronted by profound mysteries. Therefore when new facts supported by many irrefragable proofs are brought forward, the new facts being positive facts that do not contradict the old positive facts, lovers of truth ought to bow before them and receive them joyfully.

Taken for all in all nothing is simpler than cryptesthesia; no more need be accepted than that *the human mind has means of cognition other than our five poor senses.* This is not an extraordinarily bold assertion, and cannot be rejected *a priori.* To deny this *a priori* is to dare to assert that those five poor senses delimit the knowable.

The case for ectoplasms and telekinesis is the same. No more need be accepted than that in the immensity of the Cosmos there may be intelligent energies (human or non-human) that can act on matter. This also is not a very rash hypothesis. What is rash is not to suppose that such forces exist, but to affirm that they do not.

What man of science worthy of the name could affirm that science has classified, analyzed, and penetrated all the energies of immeasurable nature, or could make the strange and pretentious claim that we know all the dynamic manifestations in the world! A mere glance over the list of possible vibrations of the Ether, itself a hypothesis and a mystery, shows many of which we know nothing; and is it not foolish to aver that all the phenomena in the universe can be only vibrations of Ether?

To admit telekinesis and ectoplasms is not to destroy even the smallest fragment of science; it is but to admit new data, and that there are unknown energies. Then why be indignant, when, on the basis of thousands of observations and experiments, we affirm one of those unknown energies?

Everything that is not in formal contradiction with known facts is possible. Well, materializations and telekinesis do not contradict one single established scientific fact. That a hand having all the attributes of a living hand should be formed from a whitish cloud in no way nullifies the laws of circulation, nutrition, and structure of a normal hand. It is new fact but not a contradictory one.

VII

It is true that in this terrifying science of metapsychics there is one fact more terrible than others—Premonition. This is established by sure proofs, but it is incomprehensible by us. Our psychological constitution forbids the concept that future events are as determinate as past events, and that inexorable fatality regulates human and non-human affairs shown to the smallest detail. We shall not seek to explore farther into this abyss. Unquestionably premonition is not in contradiction with scientific data; but (and this is perhaps more formidable) it clashes strongly with our consciousness, for that consciousness refuses to admit the inevitability of that which is yet to come.

We shall therefore attempt neither explanation nor justification of premonitions. We shall keep within the boundary of positive

facts; establishing these without concerning ourselves with the inferences they involve and without deducing nebulous theories. Our function is to know what actually is, not what is possible. Sir William Crookes so stated the problem, and we shall follow his lead.

VIII

We have demonstrated the reality of the facts, but this is only a first step. A fact by itself is a small thing unless it be linked logically with homologous facts, so that a coherent relation with seemingly disparate phenomena emerges to view with an outline at least of a tenable theory. We are therefore constrained, the facts being demonstrated, to discuss theories if only to discover the profound significance of the facts.

We shall be brief, though innumerable ponderous volumes have been written on metapsychic theories.

At the outset it must be laid down that in order to construct a complete theory of metapsychics it is not sufficient to establish one that satisfies cryptesthesia, another for telekinesis, and a third for ectoplasms. Any tenable theory must give some sort of synthetic explanation of all three. The more we study the complex details of these phenomena, the closer their connection is seen to be.

Many scientific men, notably the distinguished members of the S. P. R. (especially F. Podmore and H. Sidgwick) thought at first that everything could be reduced to telepathy; that is, in final analysis, to a cerebral vibration in an individual A, corresponding to a cerebral vibration in another individual, B. According to them telepathy explained everything. But today Sir William Barrett and Sir Oliver Lodge think quite otherwise.

Telepathy is a phenomenon whose extent may be fantastically exaggerated. Distance counts for nothing, and an emotion in A may be transmitted to B, even if there is a thousand miles between them. And moreover for this transmission to occur it is not necessary that either A or B should be conscious of the vibrations that move their minds. Will and consciousness have no part in the phenomena; it suffices that an ancient memory of which it is entirely ignorant should be buried in A's consciousness for it to be transmitted to B. The consciousness of both may equally be

unaware of the whole proceeding. This clearing-house is in the subconsciousness.

If all that is claimed for telepathy is to be accepted, the full implications of this ambitious but frail theory must be realized. Since a human thought, however unconscious, however distant, or however ancient, can react upon another human thought, it suffices that as soon as B experiences an emotion or a cognition, there should be anywhere on this planet another person, A, having the same emotion or cognition, to explain that of B. It follows that telepathy can always, or nearly always, be invoked, and that A, however indifferent, however distant, or however unconscious he may be, has transmitted this emotion to B. The facts that are or have been unknown to any living person are few indeed.

This theory seems to me dangerously exclusive. In several of the preceding chapters, instances of super-normal consciousness (cryptesthesia) have been given that cannot be explained by telepathy.

In the first place, premonitions, without exception. In these there is no room for telepathy, since neither A nor B can know the future by ordinary means.

But even outside premonitions there are sometimes astonishing divinations, reproductions of drawings taken at random from among many others, and cognitions of words that no one knows of. Drawings in an envelope have been presented to a sensitive for reproduction, and occasionally (the experiment being then still more rigorous) the experimenter has been unaware of the contents of the envelope, so that no person living or dead knows the particular design to be guessed by B. Second-sight, lucidity, clairvoyance (*hellsehen*), cryptesthesia, as I prefer to call it, are therefore actualities that telepathy cannot explain. In the numerous experiments with Mrs. Piper many curious and very precise details were given on distant families, details that were unknown to the persons questioning Mrs. Piper.

To read the many accounts of monitions given above is to perceive that in at least one-third of the cases, telepathy (even allowing it an extreme and almost absurd extension) does not suffice to explain the cognition sometimes shown by a sensitive of things that no normal intelligence could be aware of.

Far from denying telepathy we strongly affirm that it exists, and even that it is one of the most incontestable facts of metapsychology. An emotion, a thought, and (more extraordinary

still) a name, a number, or a drawing can be transmitted from A to B. If, as it seems to me, cryptesthesia is the cognition of the actual, then human thought, being itself an actuality, can provoke cryptesthesia.

Telepathy is therefore only a particular case of cryptesthesia. I even think that among the unknown vibrations that bring cryptesthesia into action, human thought is one of those that can most easily be transmitted.

If the word *telepathy* is held to mean that there is synchronous and synergetic vibrations of two human thoughts, it is a hypothesis. Cryptesthesia, on the contrary, is not a hypothesis. It is a word indicating a fact. Truth to tell, it is nothing but a word, since it signifies a means of cognition unknown to us. But till the true theory comes, the fact must suffice.

In any case, telepathy presupposes cryptesthesia, since the faculty that enables it to receive the vibrations of another's thought implies a new and incomprehensible function. That a drawing known to A, enclosed in an opaque envelope, should be reproduced by B is entirely mysterious, and the mystery is no deeper if A holding the drawing has no idea what it may be; perhaps, indeed, the mental vibration of A in visualizing a drawing is actually, in itself, more obscure than the clear outlines of a drawing locked away in a box.

After all, it does not signify whether one or the other difficulty is the greater—the facts are there, the brutal facts, ordering us to accept both cryptesthesia and telepathy. All that can be conceded is that telepathy is a special and frequent case of cryptesthesia.

IX

When we speak of a mysterious faculty of cognition, saying no more, we do but state our ignorance: and this ignorance is coextensive with cryptesthesia; we cannot assign limits to it.

Mrs. Piper speaks to Mrs. Verrall of an Aunt Susan, born in 1791, who had in her house a portrait of her son painted in oils. This was a fact that Mrs. Verrall did not know and never had known. How did this precise and insignificant fact reach Mrs. Piper's mind? A hypothesis has been put forward that so-called inert things emit special vibrations, emanations of some kind, which excite cryptesthesia in sensitives, though they do not affect the normal senses.

The emanations from subterranean springs or metals moving the dowser's rod are good examples of this. Since there is one rhabdic force some of whose laws are known, why should there not be others?

A ring worn by Martin's grandmother has retained some effluvia of this woman so that the sensitive to whom this ring is given will say something about her—a name, a detail of her dress, a long-forgotten accident, a trait of character. This has been called psychometry, a very incorrect term, to which I prefer "pragmatic cryptesthesia," meaning a sensibility to emanations from things.

It is quite possible that there may be emanations from things; but in many cases lucidity comes into play without (apparently) any material object to awaken it. If, for some few cases of haunting, it may be supposed that the objects in a house have retained, as it were, a vapour emanating from those who have dwelt in it, this supposition is very far from accounting for all the phenomena, and the hypothesis applies only to a very few particular cases.

The hypothesis of emanations is perhaps partially applicable, but is nearly always inadequate; it may help to explain some cases, but for most of the phenomena of cryptesthesia it is inoperative.

X

As a second hypothesis, it may be supposed that sometimes the normal human senses may attain a prodigious acuity; so that visual sensibility may become so sharp as to distinguish clearly a drawing in an opaque envelope, or auditory sensibility may become so keen as to hear the ticking of a watch 600 miles away.

This hyperæsthesia is not altogether absurd; it would only be an extraordinary extension of a normal faculty, and there are some very rare cases of cryptesthesia that seem of a kind best to be explained by superacuity of the senses, or perhaps of their transposition. But in most cases no sensorial hyperæsthesia, however great, would cover the facts, for there is very much more than vision and audition at a distance.

XI

A third and very simple hypothesis now presents itself. It has been adopted from the first with unreflecting enthusiasm. It is that the mind of the sensitive is invaded, possessed, and replaced by

another mind—that of a deceased person whose intelligence and consciousness are not dead. George Pelham after his death continues to exist as a spirit, which then speaks by the brain, the larynx, and the lips of Mrs. Piper, who is the intermediary (medium) between the world of the living and the world of the dead.

We have now come to the spiritist hypothesis.

It is neither to be desired nor feared. When we devote ourselves to the high task of seeking pure truth, we ought not to be intimidated by the opinion of the crowd, nor allured by any obscure desire for personal immortality.

The spiritist theory, disencumbered from superstitions that weaken it, may be expressed in a few words.

"The human mind is not annihilated at the moment of death. It continues to evolve in a world that is not conditioned by space and time. This mind, retaining some of the characteristics that it had during life—its individuality, its consciousness, and its personality—can manifest itself through certain privileged living persons, by taking possession of their body (brain, muscles, and nerves); it then writes, sees, thinks, and speaks as in the time when it was incarnate in flesh. The minds of the dead know things near and far, past, present, or even future. They can speak languages unknown to their medium, can compose verses, solve problems, and discuss questions, when the medium, left to himself, would be incapable of composing those verses, solving those problems, or discussing those questions. The consciousness of the Self has not disappeared; for there is no true survival without consciousness of the Self.

"Thus, when the consciousness of George Pelham is substituted for that of Mrs. Piper, Mrs. Piper knows all that the discarnate knew. When George Pelham takes possession there is no more Mrs. Piper; there is only George Pelham.

"To account for all that George Pelham does by 'lucidity' is to give lucidity an enormous and improbable extension; it is simpler to make one single hypothesis—the survival of George Pelham, and his incarnation in Mrs. Piper.

"Since man does not die, he cannot be born. It follows that there is no birth for minds (Allan Kardec). Discarnate minds are incorporate in children who have just been born. Till then they wander in the world, in the Beyond, painfully seeking to manifest, sometimes incarnating in young children about to be born, sometimes acting through mediums."

"There is no death," said Florence Marryat. *"On ne meurt pas,"* wrote Chevreul.

The hypothesis is frank and clear. By conferring omniscience on spirits it explains most of the facts, but it involves so many improbabilities that, despite its seeming simplicity, I find myself unable to adopt it. Nevertheless I oppose it half-heartedly, for I am quite unable to bring forward any wholly satisfactory counter-theory.

1. Everything seems to prove that the intelligence is a function of the brain, that it depends on the integrity of the cerebral mechanism, and on the volume and quality of the blood that irrigates it.

It is possible, it is even probable, that there may exist in nature other intelligences under other conditions than the physical conditions of terrestrial life; *but they would no longer be human intelligences.* Consequently, should they desire to enter into relations with us, they would pity our coarse but inevitable anthropomorphism, and, in order to be understood, would have to clothe themselves in human names and human sentiments. But they would not belong to humanity, since the mind, whether human or animal, can possess the human psychological characteristics of consciousness, memory, sensibility, reason, and will only if the brain exists. Thousands and thousands of experiments establish so close a relation between the brain as organ and intelligence as function, that it is as impossible to admit the persistence of the function (mind) without the organ (brain) as the renal secretion without the kidney.

2. The word "survival" means survival of consciousness; for in the absence of consciousness and memory, survival has no interest for us. We are well aware that the atoms of carbon, phosphorus, hydrogen, oxygen, nitrogen, and sulphur that make up our bodies are immortal, but what is that to us? The animistic survival of some hypothetical vital force or soul, if the memory of my Self has vanished, concerns me no more than the survival of the phosphorus in my brain. Now innumerable facts have proved that memory is a function that very soon disappears, that asphyxia, anæmia, and poisons impair it immediately; it is extremely frail; it diminishes rapidly with advancing age. To survive without remembrance of the old Self is not to survive at all.

And what is it that is to survive? Will the old man who has fallen into second childhood have the Self of his intellectual prime

or the Self of his decrepitude? Will the Self of a person who stammered continue to stammer in the Beyond? What puerility!

Materlinck has expressed this in admirable words, "This 'I,' so uncertain, so fugitive, and so precarious, evading all definition, is so entirely the centre of our being, and interests us so exclusively, that all the realities of life fade when confronted with that phantasm. If remembrance of certain facts, nearly always insignificant, does not accompany us . . . it is nothing to me that the highest, freest, and noblest parts of my mind should shine, living and eternal, in supreme bliss; they are not Me; I do not know them. Death has cut the links of nerves, or the memories that bound them to that unknown central point at which I feel myself complete."

This does not signify negation of any intelligent energies apart from a brain; but such hypothetical intelligent forces, independent of a material substratum, have nothing in common with human minds.

3. There are all degrees between the almost perfect re-constitution of a vanished human personality such as George Pelham (though this is very rare and G. P.'s case nearly unique) and the creation of obviously factitious personalities, which is very common and frequently observed.

I suggest to A. that she is a little girl named Madelon Martin, neither the name nor personality having any reality except in my fancy, and forthwith she becomes Madelon Martin. If by chance a Madelon Martin has existed, or still exists, and A. has known her, she will at once reproduce her characteristics with marvellous fidelity. What is, then, the cause for surprise if, by some unforeseen auto-suggestion, Mrs. Piper has thought herself to be George Pelham, and then, by her wonderful powers of cryptesthesia, she should reproduce the tastes, the intonations, the passions, and the remembrances of George Pelham?

Assuredly if George Pelham was never known to A., and she faithfully reproduces his thought, we must ascribe to A. intense and amazing powers of cryptesthesia. (This is permissible, for its limits are unknown.) Then the personality of George Pelham will seem to be reconstituted integrally, and yet this personality, in spite of his reiterated affirmations, may be as factitious as the others. Perhaps this personification of George Pelham is due only to a splendid and far-reaching lucidity.

As all degrees of personification are observed, the manifesting

personalities rarely or never show such strong individuality as did George Pelham, so conformable to the actual person who lived. Sometimes, as in the case of Phinuit, G. P.'s predecessor, the personalities produced are imaginary. John King is probably a fanciful creation of Eusapia; and Rector, Imperator, and Mentor are fanciful creations of Stainton Moses. The queerest personalities can easily be evoked by hypnotic suggestions. The only difference between the somnambule and the medium is that while the actions

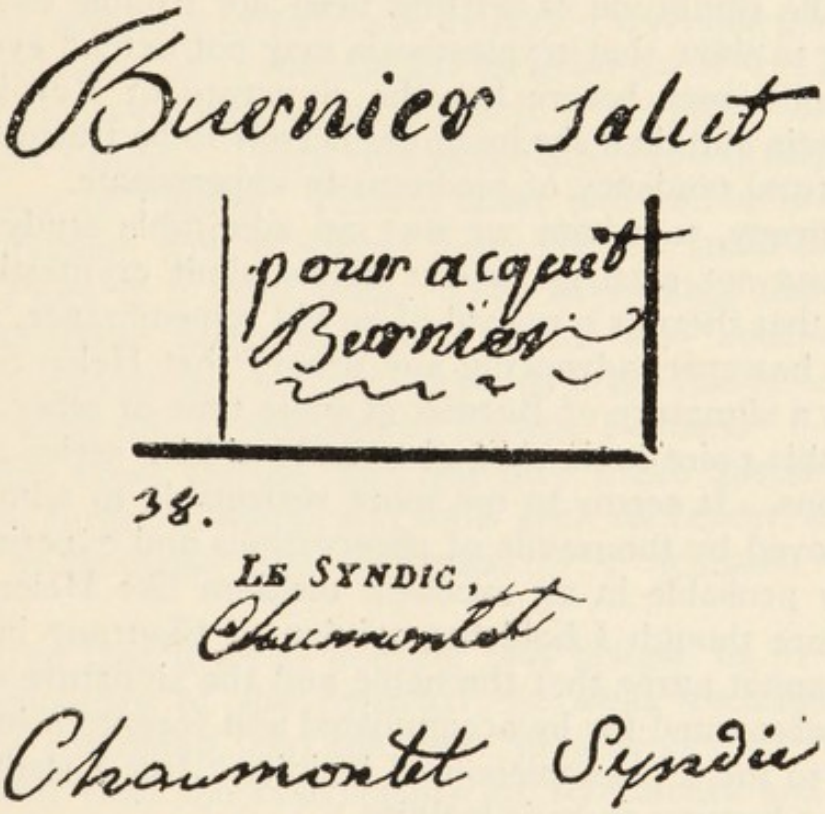


Fig. 25.—Comparison of the authentic signatures of the Syndic Chaumontet and the Curé Burnier with those written by Helen Smith. The top and bottom lines are from Helen's hand.

(After Flournoy, *loc. cit.*, p. 409.)

of the former are due to the verbal suggestion of the magnetizer, those of the latter are due to an auto-suggestion whose origin is unknown. Since it is impossible to accept as authentic the childish personifications of common hypnotism, why should we accept those that are a little more perfect? The transition from the one to the other is gradual; where are we to stop? What criterion have we for saying "This one is true, that is imaginary?" We see so many that are obviously imaginary that we can scarcely avoid the inference that all are.

The ease and frequency with which factitious personalities are produced renders the production of real personifications very doubtful.

We may hesitate a moment when Helen accurately reproduces Burnier's signature, for she signs like Burnier, whose writing she has doubtless never seen; but she also incarnates Cagliostro and Marie Antoinette! Why, then, should the personification of Burnier be more real than that of Marie Antoinette, of Cagliostro, of an Indian prince, or any other of the manifestly imaginary creations? The similitude of writing need not trouble us; for there is nothing to show that cryptesthesia may not extend even to that: Helen Smith sees before her the signature of Burnier by her cryptesthesia and then she imagines herself to be Burnier in virtue of the natural tendency of mediums to impersonate.

T. Flournoy, to whom we owe an admirable study of Helen Smith, does not even go so far as to admit cryptesthesia. He supposes that there is a revival of an old remembrance, and thinks (without, however, advancing any proof) that Helen Smith must have seen a signature of Burnier at some time or other. In order to reach this point he is obliged to make a long series of unlikely suppositions. It seems to me more reasonable to admit cryptesthesia, proved by thousands of observations and experiments, and extremely probable in an excellent medium like Helen Smith.

Therefore though I hold the opinion of Flournoy in much respect, I cannot agree that the name and the signature of Burnier are to be accounted for by accumulated and forgotten impressions. It seems to me a phenomenon of lucidity. But I shall not infer incarnation because there is lucidity.

Highly also as I esteem the opinions of my distinguished friend, Sir Oliver Lodge, I cannot think survival the most probable explanation in Raymond's case. It seems, on the contrary, that if flashes of lucidity are admitted (and the reality of lucidity is not disputed) and also symbolization; if it is recognized that mediums have an invincible tendency to reconstitute former personalities, we come in the end to less improbable hypotheses than that of survival.

4. Cryptesthesia comes into play without any necessity for supposing that a discarnate human being is speaking by the voice or writing by the hand of the medium. Details about living persons have been furnished which in no way imply the existence of a vanished entity. When Mrs. Thompson sees the word *Carqueiranne* on the forehead of M. Moutonnier it is unnecessary to

suppose that Nelly showed her this. The hypothesis that Nelly has survived serves no purpose. Nelly is an imaginary being who greatly facilitates experiment, but is not necessary to it; it is scarcely a working hypothesis, since this complication is not required. Mrs. Thompson on taking my son's watch says, "Three generations mingled." Nelly is speaking, but Nelly is only a symbol; the reality is Mrs. Thompson speaking and using her fine faculty of cryptesthesia; there is no need to bring in the personality of her granddaughter.

Phinuit, speaking by the voice of Mrs. Piper, has given extraordinary instances of cryptesthesia, as good as, if not better than, those of George Pelham, but Phinuit is obviously a creation of Mrs. Piper's mind. There was never any French doctor at Metz by the name of Phinuit. Phinuit never existed; he is Mrs. Piper. George Pelham, who is neither more nor less lucid than Phinuit, is Mrs. Piper in a lucid state. Then everything that she knows by cryptesthesia about George Pelham, who once existed but whose consciousness vanished when his heart ceased to beat, crystallizes round this personality of George Pelham.

5. When these entities manifest they make mistakes, trifle so childishly, forget so much, and show such reticences, that it is impossible to suppose that the spirit of a deceased person has returned.

It is true that there is nothing that obliges us to attribute to the personalities of the departed the same feelings, the same modes of reasoning, and the same judgments that they had on earth. But then the resemblance of sentiments and reasonings verified in certain cases must not be brought into the argument, since in the majority of instances this resemblance is outrageously wanting. These personages take pleasure in absurd jokes and childish plays on words, and make up sentences that resemble puns. I do not know who it was that said, "If survival involves having the mentality of a discarnate, I prefer not to survive." These are rags and tatters of intelligence, and, with few exceptions, of a low-grade intelligence. These discarnates have forgotten essential things and busy themselves with minutiæ to which they would not have given a moment during life. That one should come back to earth to speak of a sleeve-link is not merely feeble; it has no likelihood at all. This is a strong argument against the spiritist doctrine.

This poor spiritist personality is not in any way *incoherent;* it

is simply low grade and very low grade, being, with few exceptions, much below average intelligence; but it remains consistently the same for many months—infantile like Feda and Nelly; facetious like Vincenzo; erudite and mystical like Myers P.; jovial like Phinuit.

The rejoinder is made that the relation of spirits to a human brain is probably not very easy; that the brain of the medium is an imperfect instrument, and the incoherences are due to want of co-ordination between the instrument and he who plays on it. But what a mass of hypotheses and symbolical interpretations, bristling with obscurities and fancies, in order to evade the evidence that the psychological personality of the discarnate is quite different from that of the person during his life-time.

Not only is this psychological personality different from what it was in life, but it is nearly always notoriously inferior at any rate from our anthropomorphic point of view.

Everything can be very simply explained if we admit that there is never anything whatever at work but the thoughts of the medium, a being very human indeed and exclusively human, whose subconscious mental operations are rudimentary, and, so to say, amorphous. In our simplicity we think we hear the words of a discarnate, when in fact we are witnessing the waves of subconsciousness grouping themselves round a fictitious personality.

6. Another characteristic of spiritist personalities is that they shroud themselves in mystery; as if the mystery of their presence were not enough. There are reticences, implications, and veiled allusions that need much sagacity to understand. At certain times they seem to know a great deal, and then when becoming most interesting, they suddenly stop and go wandering. It may legitimately be inferred that if they do not tell more it is because they do not know more. They rarely give a plain answer to a plain question. If they were before a board of examiners they would not pass, for they answer badly and not to the point.

That is doubtless the reason—disastrous to the spiritist hypothesis—why nothing has been revealed by deceased personalities that was not already known to the generality of mankind. They have not helped us to a single step forward in geometry, in physics, in physiology, or even in metaphysics. They have never been able to prove that they know more than the ordinary man on any subject soever. No unexpected discovery has been indicated; no revelation has been made. The answers, with the rarest excep-

tions, are desperately commonplace. Not the smallest atom of scientific knowledge has been anticipated.

There are wonderful imitations of style, such as Dickens's romance, and the verses of Molière dictated to Victor Hugo. But a parody is not authorship. It is clever literary work, but it does not come from a Beyond. The human intelligence that composes this prose and verse is in no way beyond human powers. It is not the semi-divine inspiration that we might expect from spirits.

The lucidity of some mediums is amazing, but lucidity is not survival. Survival implies the continuance of personal consciousness. F. Myers lived on the earth; he was himself and no other, with intentions, habits, tastes, thoughts, remembrances, hopes, and an intelligence which made him a definite personality very different from all others. But when Mrs. Verrall's hand writes, "I am Myers," or Mrs. Piper's voice says, "I am Myers," it is useless to try to find vague or even exact analogies between Myers V., or Myers P., with the real Myers; even if such analogies are discoverable, they are not enough to prove that, independently of Mrs. Verrall or Mrs. Piper or any other lucid medium, there is somewhere in space a human consciousness that says "I," identical with the consciousness of our greatly regretted friend, and retaining his primordial intellectual character and coherent remembrances as we knew him at Leckhampton House.

All the indications transmitted by discarnates on their actual, material, or psychological state inspire me with very limited confidence, for it is needful first of all to prove that there are any discarnates. I do not share the robust faith of one of Sir A. Conan Doyle's correspondents, Mr. Hubert Wales, who writes with simple anthropomorphism, that spirits "have bodies, which, though imperceptible by our senses, are as solid to them as ours are to us . . . that they have no age, no pain, no rich and poor; that they wear clothes and take nourishment; that they do not sleep, though they spoke of passing occasionally into a semi-conscious state . . . that people of similar thoughts, tastes, and feelings gravitate together; that married couples do not necessarily reunite . . . " (*The New Revelation,* Conan Doyle, p. 148).

I cannot, alas! share the deep convictions of my large-minded friend, W. Stead, who, when I went to see him after he had lost his son, said to me, "Why should I be sad? I wrote to him this morning and he will answer me this evening. He is quite happy and we are in daily relations as formerly."

In my humble opinion proof of survival has not been given by subjective metapsychics, but I hasten to add that a near approach to that proof has been made. If proof of surviving consciousness could have been given it would have been given.

Can such proof be given? I really do not see what better arguments can be furnished than the cases of George Pelham and Raymond Lodge; and I cannot imagine any experiments that would be more decisive, or any observations that would carry more weight.

Truth to tell—and one must be as cautious in denial as in assertion—some facts tend to make us believe strongly in the survival of vanished personalities. Why should mediums, even when they have read no spiritualist books, and are unacquainted with spiritualist doctrines, proceed at once to personify some deceased person or other? Why does the new personality affirm itself so persistently, so energetically, and sometimes with so much verisimilitude? Why does it separate itself so sharply from the personality of the medium? All the words of powerful mediums are pregnant, so to say, with the theory of survival. These are semblances, perhaps, but why should the semblances be there?

These hesitations must be forgiven me. On the threshold of a mystery we may well be troubled and decline to use trenchant words and peremptory phrases in ludicrous contrast with our inner painful uncertainty.

If we had nothing to go upon but subjective metapsychics we might stop at cryptesthesia as a simple and necessary hypothesis covering everything. Let us therefore admit, as the only fully demonstrated proposition, that there actually is an intense form of cryptesthesia, defined by unmeasured powers of cognition, and a sensibility of the soul to subtle vibrations that none of our physical instruments can reveal.

There is, then, no need to call in the intervention of external energies and my inference will be—the human mind is much more powerful and more sensitive than we know or think.

XII

The hypothesis involved is very simple; to admit an extension of our intellectual powers is scarcely a hypothesis at all. But we can go no farther, for the more we try to analyze this inaccessible faculty of cryptesthesia, the less we understand it. Telepathy,

superacuity of the senses, actual emanations—if these explain some of the phenomena they do not account for anywhere near all of them; and we must recognize that we know only the effects, and not the cause of cryptesthesia: its modalities and its mechanism escape us entirely.

The transition from subjective to objective phenomena is not so abrupt as might be thought; for to produce a cryptesthetic sensation there must be some external phenomenon, probably a vibration, since energy is transmitted by vibrations. (Of the Ether?) If, then, a notion arises due to cryptesthesia some external power must have been in action.

Monitions, of death or any other, can be accounted for only by a vibration of some unknown kind impinging upon our subconsciousness. There must therefore be some external thing that has acted upon us. This external thing which moves the subconscious Self is objective; our instruments register nothing, but it is objective all the same.

Then we have to consider that strange power of symbolization, which is one of the corner-stones in metapsychic science.

In order that any notion may be understood by us, it must take a form comprehensible by our conscious mind. For instance an announcement of the death of A will only be understood by the consciousness of B if conveyed by some intelligible representation. Then the truncated and barely outlined notion that A is dead is visualized as a phantom, or externalized as a voice, and many details are added, sometimes incoherent, but sometimes very synthetic, that complete the embryonic idea. These symbols that one is tempted to take for realities have no reality in themselves; they are but the translation by a symbol of the particular notion that arouses the cryptesthesia.

Even when, as in a haunted house, the same personage appears to different persons successively under the same form, this does not prove that there is a real external phantom. It is possibly because the symbolization has been exercised in the same way by two different percipients. In all this we are only talking in hypotheses.

I do not allow myself to be deceived by the mirage presented by words. Cryptesthesia is a word that does not even hide our ignorance. To say that cryptesthesia exists does not in any way solve the very troubling questions that we cannot answer. These may perhaps be answered by future metapsychic science, provided that it remain strictly experimental.

1. Have all persons some rudimentary cryptesthesia?

2. Why is it so developed in certain mediums? Why does hypnotism favour its appearance?

3. In spiritist séances why does the medium show from the outset an invincible tendency to assume the existence of a guide that seems to have an intelligence distinct from that of the medium?

4. Why, in the case of powerful mediums, are objective phenomena (materializations and telekinesis) nearly always associated with subjective phenomena (cryptesthesia)?

5. By what channel does cognition of things beyond sensorial perception reach the human mind? Is it the vibration of human intelligence that travels? Or do the vibrations of things present themselves to our intelligence?

6. Must we suppose that only living human minds are in play and that no others intervene—those of the dead, or of angels, demons, or gods?

In the actual state of our embryonic science these are insoluble problems. I call a halt at the facts, and decline to be led beyond them. I do not condemn the spiritist theory. It is certainly premature, and probably erroneous. But it has the immense merit of having stimulated experiment. It is one of those working hypotheses that Claude Bernard considered so fruitful. In any case, theory is by no means proved, since it is frail, inconsistent, and incoherent; we will, provisionally at least, content ourselves with saying that transcendental modes of cognition actually exist whose extent we cannot define, and therefore that all the powers that spiritualists ascribe to spirits should be attributed to that superior knowledge with which the human brain sometimes appears to be endowed.

We shall presently consider whether materializations and telekinesis may give some support to the spiritist theory; but from this time forth we can say that, taking subjective facts alone, it is not demonstrated; and the trying thing is that one does not see how it could be demonstrated—how it could be proved that human consciousness with its remembrances and its personality could survive the death of the brain.

Still, an immense step forward has been made; it has been proved that a whole world of powers, *sometimes accessible*, vibrates around us. We cannot even suspect the nature of those powers; we only see their effects. These effects are, however, so

clear that we can assert the reality of the forces; if some mediums and some somnambulists can know things that their senses have not shown them it is that unknown forces have reached and acted upon their sensitiveness. That is all that we can say today.

XIII

Consequently the phenomena that we call subjective are only apparently so. Every phenomenon of cryptesthesia must be preceded by an exterior energy that has started it, some unknown vibration that has set in motion the latent energies of our human mind, unaware of all its powers.

XIV

There is something more than subjective metapsychics; something more than great superacuity of the senses and mysterious depths of mind: there is the action of intelligence on matter. And the appalling obscurity of the whole question, when we extend cryptesthesia without limits, becomes more appalling still.

There are the facts: they compel us to admit movements at a distance; and strange as this phenomenon may be it is not the strangest. It is even the most elementary fact in this embryonic and terrifying science.

That a mechanical energy of an unknown kind should emanate from the human body and move a table, and shake a piece of board with knocking, is not entirely incomprehensible. But that this force should produce word-making sound, lights, and living human forms—this indeed goes beyond all our concepts of the possible. A warm and living hand, a mouth that speaks, eyes that see, and thought that thrills, like the hand, the mouth, the eyes, and the thought of a human being—these are phenomena that put us to utter confusion.

We are in thick darkness. It was already impossible to understand how Banca, at the very moment that his family was about to perish a couple of thousand miles away, could speak of *death lying in wait for his family;* or how Figueroa could see, six months before the event, a peasant dressed in black strike a mule aside to let him pass up a spiral stair. But objective metapsychic is more puzzling still; it is an unmitigated mystery, and all attempts at explanation seem puerile.

Nevertheless no one has the right to withdraw these facts from scientific investigation.

Metapsychic science will certainly pass through many phases. It is at present in travail of greater things; but it is much that the facts have been well proved and are too plain to be denied. Unfortunately they cannot yet be built into a consistent and tenable theory; it beseems us to examine what may be inferred from all these astounding observations and amazing experiments without fear, but also without arrogance that our human limitations would render laughable.

As to materializations and telekinesis our opinion may be summed up by saying, *These phenomena may be attributed to energies of human origin.*

XV

Thanks to Ochorowicz, Schrenck-Notzing, Mme. Bisson, and Crawford, who carried on Crookes's work, it seems now fairly proved that materializations are *ectoplasms;* that is, sarcodic extensions emanating from the body of a medium, precisely as a pseudopod is projected from an amœboid cell. All zoologists are aware that an amœba can project a sarcode to seize upon alimentary matter and infest it. In a similar fashion fluidic filaments or extensions like clouds, veils, or stems may proceed from the body of the entranced medium, can then become organic, and take on the semblance of human limbs and occasionally of whole bodies.

In their first stage these ectoplasms are invisible, but can move objects and can give raps on a table. Later on they become visible though nebulous and sketchy. Still later they take human form, for they have the extraordinary property that they change their forms and their consistence and evolve under our eyes. In a few seconds the nebulous embryo that exudes from the body of the medium becomes an actual being; though the human ovum requires thirty years to evolve into the adult form.

Sometimes the phantom appears suddenly, without passing through the phase of luminous cloud; but this phenomenon is probably of the same order as the slower development.

This ectoplasmic formation at the expense of the physiological organism of the medium is now beyond all dispute. It is prodigiously strange, prodigiously unusual, and it would seem so unlikely as to be incredible; but we must give in to the facts. I am confi-

dent that twenty-five years hence orthodox science will admit telekinesis and ectoplasms as undisputed phenomena. The profound changes in ideas on this subject that have taken place the last twenty-five years warrant this assurance.

XVI

To state facts is not enough; we must summon up courage to outline some kind of theory, imperfect though it will necessarily be.

It has been shown that as regards subjective metapsychics the simplest and most rational explanation is to suppose the existence of a faculty of supernormal cognition that we have called cryptesthesia, setting in motion the human intelligence by certain vibrations that do not move the normal senses.

Similarly in objective metapsychics the simplest and most rational explanation is analogous—to suppose that the human organism has a faculty of external projection, of "ectoplasmisation," the emission of a material substance that can become organic.

It follows that the most reasonable hypothesis is that there are in the human body energies capable of being exteriorized.

But though this hypothesis is the most simple that can be advanced it is not really simple at all. It implies a new physiology, a new chemistry, and a new physics.

Beings with a human shape, that begin and end in white veils, that come and go like clouds, are not human beings.

Man is so close to the animal that everything proper to a human being must be allowed to animals also, in part at any rate. We have no essential function that is not possessed by any other mammal, nay even by any vertebrate or invertebrate. The generative, circulatory, nutritive, and digestive processes are practically the same in all. The difference between the animal and man is that man has a slightly more penetrating intelligence, of larger scope, and capable of remembering, analyzing, and abstracting. But this difference is not essential: man merely possesses a higher degree of intelligence. That is all; he is a highly intelligent animal, but he is an animal. Now, to transform matter, to become a living ephemeral being, and to create ephemeral living matter, is to open a new world. We are evolving in another dimension. Man is no longer man. He no longer belongs to the animal kingdom. He even transcends the mechanical world in

which we move where chemistry, physics, and mathematics reign supreme.

Anything is possible. Perhaps human powers, whether moral or material, go far beyond what habitual and daily experience would lead us to think. It is demonstrated that fluidic emanations can proceed from the body and develop into human forms. It is demonstrated that this exteriorization is one of the properties of living matter.

Geley, in an able book, maintains the subconscious to be a kind of creative energy determining the histological mutations whereby the larva is transformed into a chrysalis and the chrysalis into the perfect insect. The subconscious produces stigmata and miraculous cures. It is the subconscious that directs materializations.

Certainly to connect metapsychic phenomena with the most positive data of embryology and zoology is bold and deep thinking. But this does not seem to me to bring explanation. This powerful subconscious, so omnipresent and efficient, is an undemonstrated energy, it is always the *quid ignotum*.

Even for Geley the subconscious is insufficient, and he is inclined to admit—without definitely affirming this—that the high and complex phenomena of mediumship seem to show external direction and intention that cannot be referred to the medium or the experimenters.

Such is Geley's opinion; it is not altogether mine. I shall say, with Lodge, that we must select the least extravagant among all the possible explanations. None of them, he says, fits all the facts. To frame theories is as premature as it would have been for Galvani to attempt to explain the nature of electricity.

In his fine work on human personality, F. Myers sketched out a theory that in some points resembles Geley's, for elementary metapsychic phenomena at any rate. According to Myers there are many personalities, subliminal centres, co-existing, working, thinking, comparing, and analyzing side by side with the principal centre (consciousness) which scarcely knows of their existence. These secondary centres are more open to influence by cryptesthetic vibrations than the central consciousness.

Certainly. But immediately afterwards, in order to explain the higher phenomena, Myers finds himself obliged formally to admit survival, and to infer that in many cases of automatic writing or speaking, these secondary centres are invaded by discarnate spirits.

The more these complex phenomena of monitions, premonitions, and collective veridical hallucinations are studied in detail, the more one is inclined to favour the hypothesis of an unknown ectoplasmic energy pertaining to human beings; and this hypothesis is so strange that all other possible hypotheses must first be exhausted.

And in the first place we can well suppose that other beings than man may move around us and influence our movements although they may not be subject to the mechanical, physical, chemical, and anatomical conditions that limit us.

Why should there not be intelligent and puissant beings distinct from those perceptible by our senses? By what right should we dare to affirm, on the basis of our limited senses, our defective intellect, and our scientific past as yet hardly three centuries old, that in the vast Cosmos man is the sole intelligent being, and that all mental reality always depends upon nerve-cells irrigated with oxygenated blood?

That there should be intellectual powers other than those of mankind and constructed on a wholly different plan is not only possible but highly probable. It might even be said to be certain. It is absurd to suppose that ours is the only mind in nature; and that inevitably every intelligent power is organized on the human or animal model with a brain as its organ.

It is obvious how deep is the mystery. For when we speak of mind, we implicitly (by our necessarily anthropomorphic way of looking at things) take it to connote memory, logic, verbal terminology, and emotion; but mind (in the human connotation) is so imperfect, so special to humanity that we cannot be fully cognizant of intelligent powers except by assimilating them more or less to mankind. This is probably a serious error, and to say "an angel is intelligent" (in the human sense) is about as logical as if a piece of red cloth were to say, An angel is red. Our notions of spirits, whether as to their form or their thoughts, are necessarily grossly anthropomorphic.

As we are now in the realm of hypotheses, we need not fear to push our thought to its logical extreme. The basis of animal intelligence is the nerve-cell; but this by no means proves that nerve-cells, or even the chemical elements that we call "material," are necessary to all phenomena of mind. Very different beings in very different worlds are conceivable where mind would exist without nerve-cells or any material substratum. The proof that

such beings exist has not been given, but their possibility is clear.

It is said: "Man only shows his mind by his brain; therefore there can be no mind without a brain." Such is the amazing logic of those who accuse us of working against science.

If it be admitted that in the universe, under conditions of space and time of which our rudimentary psychology is unaware, there are intelligent beings, interfering at certain moments in our lives, we have then a convenient hypothesis explanatory of many of the facts detailed in this book.

Mysterious beings, angels or demons, existences devoid of form, or spirits, which now and then seek to intervene in our lives, who can by means entirely unknown mould matter at will, who direct some of our thoughts and participate in some of our destinies, and who, to make themselves known (which they could not otherwise do) assume the bodily and psychological aspect of vanished human personalities—all this is a simple manner of expressing and understanding the greater part of the metapsychic phenomena.

This is the more plausible, seeing that under a close analysis of monitions and premonitions there seem to be vague intentions beyond and outside us, which transcend human concepts, as if the intelligent forces chose to stop on the threshold of the mystery, unwilling to tell everything, speaking in symbols and enigmas, outlining misty affirmations when they might be more explicit; moving plates, tables, and wooden logs, when they might (at least according to our normal thinking) operate in a chemical or physical laboratory, or at least tell us something of the mysteries of life continued after the death of the body. But they deal in a verbose theosophy; they tell us nothing useful, and do not even indicate with any precision favourable conditions for experiment.

That such spirits should be the consciousness of defunct human beings is, strictly speaking, possible; but I venture to say, with all the caution that should guard every negation, *it is not at all probable*. These discarnate souls are too fundamentally different from those of living men that they should be the same; and as for the material, how should the disintegrated body after three years in a coffin be more able to find the clothes that it wore when living than to reconstitute its heart, its liver, and its eyes, which have all become formless matter?

If then (as I cannot believe) there are spirits, and they are endowed with mysterious powers (that I do not understand) and

have mysterious intentions (which I understand no better), in any case they cannot be the consciousnesses of deceased persons. They belong to other worlds, different from our material world and from our moral world, and if they put on human semblances it must be to make themselves partially known to us.[1]

To sum up: There are three hypotheses in the field.

1. The phenomena are due to the dead, whose consciousness still persists without any material substratum. This is the spiritist theory which seems to me the least likely of any.

2. There are angels, spirits (*δαιμονες*) who can act on matter and on human minds, and intervene in human affairs.

3. The human intelligence (body and soul) is sufficiently powerful to produce both material manifestations (ectoplasms) and the subjective manifestations (cryptesthesia) that amaze us.

If I admit this third hypothesis as obviously superior to the others, it is not that I believe in it very strongly. Far otherwise. I am well aware how frail it is, how incredible, almost as incredible as the two former. But can anything better be put forward?

Perhaps; and I adopt without reserve a fourth proposition which has every chance of being true—we have as yet no satisfactory hypothesis to put forward.

In fine, I believe that future hypothesis that I cannot formulate because I do not know it.

XVII

Bewildering powers vibrate around us. The facts seem strangely inconsistent with ascertained truths. They are not. Since the facts are facts, the disharmony must be only seeming—the necessary consequence of our ignorance. This ignorance will

[1]In order to make this seemingly monstrous hypothesis in some degree acceptable, let us suppose that men do not know much more about the universe than a colony of ants knows about the earth-planet. They do not know that there are beings far superior to them in powers and intelligence; they are unaware of seas, ships, libraries, telephones, theatres, armies, courts of justice, and stars. They live as though there were nothing in the world but little bits of wood, moss, old tree-trunks, the insects that they feed upon, and the streamlets that inundate their nests. And if some ant wiser than its fellows were to tell them that there is more in the world than this he would doubtless be thought mad, and his fellows would have no difficulty in certifying him as insane. And being myself convinced that, when all is said, we know less of the Cosmos than a nest of ants knows of this planet, I am inclined, though without tangible proof, to think that other worlds may exist besides our little physico-chemical world. The notion is surprising but not unlikely.

not last for ever: the day will come, perhaps it is not far distant, when some unexpected discovery will open a new horizon to our eyes. A man of genius, a powerful medium, a happy chance—any one of these would suffice to reveal a whole series of new truths, whence will emerge not only new solutions, but further problems of which we now have no notion.

XVIII

The final outcome will be much more surprising and unexpected than our limited imagination can dream. Science, we must admit, will be transformed from top to bottom beyond our boldest anticipations.

We must advance resolutely, using exact scientific methods, being neither credulous nor timid, but trusting the marvellous power of science. Let us endeavour to recall the state of human mentality in the time of Paracelsus and Gutenberg, only four hundred years ago. Twelve generations—a very short time for the transformation of the world!

Chemistry is a marvellous science that reveals the most secret motions of the atoms, and indicates the places that these imponderable entities will take up in space by their combinations, by creating new substances. Nevertheless Chemistry began as Alchemy—own sister to Astrology.

If I had lived in the fifteenth century, I might have believed in Alchemy and Astrology; and I should have done wisely, for they have become our sciences of today. Now, I have complete confidence in metapsychics, and I do not think it will require four hundred years to grow into as exact a science as Chemistry now is.

Metapsychics has, however, to encounter a very grave difficulty special to itself that does not beset other sciences: its subject matter is not the blind forces of chemistry and physics but intelligent forces, capable of freakish, and possibly hostile, intentions. How, then, are the problems presented to be attacked? Everything seems to turn on the fall of the dice.

Fortunately it is most improbable that these intelligent forces should not be subject to definite laws, and therefore accessible to our researches.

Our aim must be to discover these laws; and who knows but that instead of being hindered by these intelligences themselves

from getting to know them, as has hitherto seemed to be the case, we may not be aided by them?

However this may be, the numerous scattered facts that have now been collected show plainly that a new mentality will pervade human society as metapsychics gains influence. Not long since we were disposed to think that there could be nothing beyond the material facts verified and studied by men of science, and there was a disposition to assign limits, and not very remote limits, beyond which we held that science could not pass. More powerful microscopes and telescopes, more sensitive galvanometers and thermometers—such things bounded our limited view. Our hopes are now vastly greater; we have a glimpse of a whole unexplored world full of mysteries before which we stand as dumb and dense as a Hottentot might before Poincaré's vortices, Herz's waves, Pasteur's microbes, or Einstein's relativity.

This new world is the unknown, the future, and our hope.[1]

As Frederic Myers and Oliver Lodge have well pointed out, perhaps a new view of human duty will emerge from these studies, which are as yet in a most elementary stage. We can scarcely foresee the subversive effects that metapsychics will have upon our ideas of the final purposes of human existence. The sciences that deal with atoms and physical forces, gravitation, heat, electricity, and chemical affinity will not be upset, for they rest on unshakable foundations. But many and great things will be added to them.

And perhaps the goal of humanity will be better understood. If we have been able to bring some of the more coherent facts of this new knowledge within the domain of positive science, that goal will be hidden in less impenetrable darkness.

At the present hour, while all is yet quite dark, our duty is plain. Let us be sober in speculation; let us study and analyze facts; let us be as bold in hypothesis as we are rigorous in experimentation.

Metapsychics will then emerge from Occultism, as Chemistry emerged from Alchemy: and none can foresee its amazing career.

But we must keep clear of illusions: the fragments of uncom-

[1]Pascal said as much in deeply significant words: "The secrets of Nature are hidden; although ever in action, the effects she produces are not always seen; time reveals them from age to age. . . . We may affirm the opposite to what the ancients have said without therefore contradicting them; and whatever authority their antiquity may have, that of truth is always greater, even when newly discovered, for truth is always more ancient than any opinion soever" (*Fragment of a Treatise on vacua,* Ed. Havet, ii, 273).

prehended truth that the science of the occult offers to us reveal the poverty of the human understanding. The study of the heavens soon convinces an astronomer that man is an infinitesimally small object in the universe. Similarly in metapsychic science, when pale and fugitive gleams reveal intellectual worlds circling around us and in us, we feel that these worlds may perhaps ever remain as distant and incomprehensible as the far, incomprehensible stars in the depths of space.

But that is no reason for refraining from increased efforts and labour. There are great depths to be sounded. The task is so noble that, even should it fail of success, the honour of having attempted it gives fresh value to life.

INDEX

INDEX

Abbott, D., 449, 455.
Abdullah, 536.
Abélard, 72.
Abelous, 121, 122.
Abren, Captain, d', 530.
Abronowski, 194.
Adam, J., 262, 283, 284.
Adam, P., 365.
Adams, 334, 572.
Adamson, 122.
Adare, Viscount, 485-488.
Æschylus, 74, 76.
Aggazotti, 418, 419.
Agnes of Bohemia, 545.
Agrippa, 14, 19.
Aischa, 503, 508.
Akoutine, 581.
Aksakoff, 27, 34, 36, 158, 159, 220, 225, 226, 274, 412, 415, 424, 450, 468, 492, 493, 535, 539, 542, 553, 557, 558, 582, 600.
Albe, d', 544.
Albertis, d', 549.
Alesi, d', 81.
Alexander, 315.
Alexandra, 369.
Alexandrina, 362.
Alexandrovna, S., 188.
Alexis Didier (see Didier).
Alice, 41, 42, 70, 71, 111, 125, 126, 129-133, 359-361, 490, 598.
Allams, 225.
Alliot, 181.
Allom, 284.
Alma, L., 127, 128.
Alphonso XII, 313.
Alrutz, S., 102.
Amicis, d', 499.
Ammianus Marcellinus, 21.
Ampère, A., 457.
Andrade, d', 529, 533.
Andreoff, 188.
Andrée, 55, 56, 65, 66.
Andrews, 145.
Anna, 121.
Annie, Aunt, 138.
Anthony, Dr., 363.
Antoinette, 42.
Apollonius, 18, 19, 159.
Appleby, 271.
Apte, 20.
Arago, 377.
Arbonsoff, 284.
Aresky, 463, 505, 508.
Argentina, 526.
Argner, 231.
Aristotle, 4, 209, 210.
Arnsburg, 432.
Arpentigny, d', 184.
Arriola, Pepito, 10, 226.
Arsonval, d', 413, 418, 440, 458.
Artus, 111.
Assagioli, 241, 242.
Athenodorus, 573.
Aub, 162.
Aubry, F. and G., 157.
Audenino, 419.
Avellino, 499.
Aylesbury, 259, 335, 343.
Azam, 32, 70.

Babinet, 28, 229.
Babinski, 100.
Bachelot, 270, 271.
Bacherini, 395.
Backer, F. de, 111.
Backmann, Dr., 127, 128.
Baeschly, 285.
Baggally, 420, 544.
Bagot, Mme., 246, 278.
Bailey, 456, 457, 463, 471, 477.
Baker, R., 255, 320.

Baker, Mme., 367.
Baldwin, 143.
Bale, 372.
Balfour, A. J., 33.
Balfour, G., 33, 176.
Ball, 284.
Ballé, 123, 124.
Balsamo, S., 367.
Banca, 617.
Bangs, 451.
Banister, 350, 356.
Baraduc, 101, 435, 436, 480, 559.
Bard, 263, 266, 321.
Baréty, 101.
Barker, 285, 390.
Barker, E., 80, 286.
Barclay, Mme., 514.
Barnard, 394.
Barr, 261.
Barreau, Mme. de, 335.
Barrett, Sir W., 7, 26, 33, 34, 86, 102, 155, 168, 171, 217, 224, 227, 229, 231, 233, 234, 431, 447, 588, 589, 591, 600, 602.
Bartolini, T., 158.
Barwell, 251.
Barzini, 473.
Baschieri, U., 159, 423.
Basserole, 291.
Batelli, 528.
Bathes, E., 152, 153.
Baudouin, M., 272.
Baugher, 111.
Bayfield, 147.
Bayol, 541.
Beale, 286, 331.
Beaufort, Mme., 173.
Beaugrand, 263, 286.
Beck, 287.
Bedford, 574.
Beilby, 333, 343.
Belbeder, 287.
Bellier, 417.
Belot, Mme., 323.
Benedikt, 238.
Benning, 557.
Béraud, Marthe, 26, 33, 34, 39, 43, 46, 399, 428, 438, 439, 441-443, 457, 466, 467, 469, 470, 474, 477, 478, 484, 503-517, 520-525, 534, 542, 544.
Beresford, Lord, 286.
Beretta, 439.
Bergen, de, 538.
Berger, 199.
Berget, 287.
Bergson, 33.
Berisso, 419.
Bernard, Claude, 8, 11, 12, 70, 84, 616.
Bernard de Courléon, 546.
Bernheim, 32, 105.
Bernstein, 191.
Bersot, 78.
Berteaux, 111.
Bertha, 270.
Berthelon, 288.
Berthon, 340.
Bertie, 289.
Bertrand, 24, 119, 291.
Besnard, 289.
Bessi, 284, 285.
Bettany, 255, 259, 336.
Betty, 475.
Bianco, 532.
Bibby, 291.
Bien Boa, 466, 467, 469, 475, 477, 490, 505-509.
Bigard, J., 261, 291, 292.
Bigge, 560.
Binet, 287.
Binns, 484.
Bishop, 288, 289, 326.
Bisson, D., 46, 432, 438, 460, 464, 467, 469, 470, 476, 477, 483, 491, 504, 510-515, 523, 544, 618.
Blackburn, 271, 485.
Blackman, 26.
Blake, C., 536.
Blanche, 347.
Blavatsky, Mme., 211, 450.
Bliss, 27.
Bloch, Mme., 290, 500.
Blocus, Mme., 81.
Blodgett, 140, 141.
Blondlot, 103.
Bocca, 419.
Boch, 290.
Bocock, 484.
Bohn, 584.

Böhm, 225.
Boirac, E., 4, 36, 106, 116, 117, 187, 195, 470.
Bois, J., 74, 81, 289.
Boislève, Baroness de, 298.
Boismont, de, 283.
Boisnard, 372.
Boissarie, 111.
Boniface, Mme., 290.
Bonjunski, 539.
Bonnamy, 307.
Bonnard, 152.
Bonnefoy, S., 323.
Bormann, 509.
Bossuet, 72.
Bottazzi, F., 34, 413, 464, 474, 478, 499, 500, 535, 597, 600.
Botzaris, 221.
Boucher, Dr., 376, 377.
Bouillaud, 8.
Bourbon, Dr., 466, 511, 512.
Bourget, P., 137, 141.
Bourneville, Dr., 20.
Boursnell, 456, 459.
Bourru, Dr., 181.
Boutleroff, 27, 274, 408, 424, 600.
Bowring, 393.
Bowstear, Dr., 290.
Boyle, 292.
Bozas, de, 545.
Bozzano, E., 36, 117, 140, 150, 152, 155, 159, 164, 180, 218, 219, 226, 260, 262, 274, 278, 328, 331, 335, 336, 338, 341, 342, 347, 349, 350, 352, 354-356, 359, 361, 363, 365-368, 370-376, 379, 381-384, 390-395, 413, 419, 480, 482, 535, 554, 555, 564-567, 569, 571, 574, 575, 577, 578, 580, 584, 600.
Brackett, L., 117, 541, 542.
Braid, J., 31, 99.
Branen, van, 424.
Brath, de, 432.
Brémon, 289, 327.
Brewern, de, 450.
Brière, Dr., 446.
Briffaut, Mme., 42, 161-163.
Briggs, V., 141.
Brighton, 261, 262.
Brisson, H., 377.
Bristow, 584, 585.
Brittain, A., 146.
Britten, 27.
Britton, 145.
Brofferio, 36, 412.
Broquet, 226.
Brompton, P., 288.
Brot, Mme., 376.
Brougham, Lord, 290.
Brown, 540, 541.
Brown, M., 140, 534, 575.
Browne, J., 307.
Bruce, Dr., 323.
Bruce, R., 553.
Brutus, 19.
Bryant, 27.
Buchanan, 177.
Buckley, 116.
Buddha, 72.
Buell, Mme., 152.
Buguet, 456, 459.
Buisson, 381.
Buloz, 282.
Burco, 183.
Bureau, A., 287, 288.
Burger, E., 261, 290, 291.
Burgik, 545.
Burnby, Lady, 202, 203.
Burnier, 164.
Burnier, Curé, 609, 610.
Burns, 217, 224.
Burot, 181.
Burrows, 300.
Burt, 88.
Burton, A., 446, 480.
Burton, J., 146.
Burton, Lady, 358.
Buscarlet, Mme., 369.
Bushell, 571.
Bute, Marquis de, 308.
Byron, Lord, 74.
Byzantios, 222, 223.

Cadello, Dr., 224.
Cæsar, 10, 16, 170, 192, 193.
Cagliostro, 77, 610.
Caillat, A., 16.
Calderone, I., 36.
Calmette, Dr., 589.
Calt, Captain, 321.

Campbell, Mme., 369.
Camus, Mme., 42.
Canaletti, 125.
Cane, du, 573.
Canius Julius, 219.
Cannelle, 102.
Capron, 582.
Carancini, 526, 528, 529, 548.
Cardan, J., 18.
Cardno, 120.
Carleton, Mme., 350, 382.
Carlotta, 525.
Carolath, Princess, 385.
Carpenter, 28, 30, 33.
Carpenter, E., 308.
Carré, 97.
Carré de Montgéron, 20.
Carrell, A., 354.
Carreras, E., 380.
Carrick, Mme., 284.
Carrington, H., 34, 145, 176, 197, 305, 413, 420, 455, 472, 535, 539, 583.
Carroll, 560.
Cartier, 501.
Cascel, C., 377.
Casimir-Périer, 178, 376, 377.
Castelvitch, Countess, 530-534.
Catherine de Medici, 183.
Catherin, 530.
Caubin, 230, 232, 236.
Cauchy, 218.
Cavalcante, S., 311, 312.
Cecchini, 548.
Celina, 226.
Chambard, 32.
Chambers, A., 149.
Chanuel, 36, 111.
Chapronière, 555.
Charazain, 101.
Charcot, 32, 99, 124, 282.
Charmides, 16.
Charpignon, 115.
Charrier, R., 585, 586.
Chasles, 10.
Chaumontet, 609.
Chaves, Colonel, 282.
Cheiro, 184, 582.
Chenoweth, Mme., 151, 366.
Cheuvreaux, Mme., 310.
Chevalon, Mlle., 170.
Cheves, Mme., 214.
Chevreul, 28, 37, 227, 229, 233, 234, 276, 279, 283, 300, 315, 318, 421, 511, 607.
Chiaia, E., 412, 413, 503.
Child, L., 144, 303.
Chomel, Dr., 118.
Chopin, 373, 374.
Chowrin, Dr., 188, 190.
Christine, 546.
Christman, B., 292.
Christmas, 292.
Cicero, 17, 18, 344, 451, 473.
Cipriani, 159.
Claparède, 81, 240-242, 528.
Clarke, 309.
Clarke, Dr., 307.
Clary, Mme., 349.
Claudet, Mme., 581.
Claudine, 338, 339.
Claughton, Mme., 271.
Clawson, 445.
Clement XIV, 552.
Clericus, 273.
Cloquet, 29, 261.
Coates, J., 177.
Cobacker, B., 226.
Coghill, Colonel, 382.
Cohen, Dr., 361.
Coleman, E., 452.
Coleman, A., 537.
Colley, Archdeacon, 463, 537, 538.
Collyer, Mme., 292, 293.
Commar, Dr., 113.
Conil, 293.
Connell, Lieutenant, 292.
Constable, F., 223.
Contamine, 324.
Conto, Dr., 530.
Cook, F., 31, 34, 38, 39, 43, 45, 137, 443, 457, 461, 462, 466, 471, 474, 478, 479, 493-495, 496, 514, 542, 548.
Cooper, Dr., 370.
Coover, E., 93, 94.
Coppinger, Mme., 335.
Cordier, N., 122, 123.
Cordula, 535.
Corneille, Dr., 429, 452.

Cornillier, P., 154, 155.
Cornis, Dr., 316.
Coromelas, 222.
Corralès, O., 483, 534, 542.
Cotte, P., 293.
Couesdon, Mme., 159.
Couesnon, Mme., 293.
Coulomb, 436.
Courmelles, Dr. de, 483.
Courtier, 222, 413, 419, 420, 440, 492, 496, 497.
Couta, Dr. Souza, 120.
Cowes, 272, 273, 423, 452.
Cox, 338, 411.
Cox, Mme., 293, 294.
Cox, Serjeant, 30.
Craigie, Colonel, 294.
Crawford, W., 430-432, 438, 441, 442, 445, 469, 491, 618.
Creery, 58, 90, 116, 445.
Crémieux, G., 219, 302, 303.
Crépieux-Jamin, 185.
Crookes, Sir W., 7, 13, 15, 30-33, 35, 44, 169, 207, 223, 407-410, 438, 448, 455, 461, 464, 467, 468, 470-472, 474, 476, 483, 485, 492-495, 514, 534, 597, 600, 602, 618.
Cumberland, 28.
Curie, M., 413, 496, 497.
Curie, P., 413, 535.
Curtius, Rufus, 18.
Cushman, A., 481.
Cuvier, 72.
Cybulski, 426.
Cyriax, Dr., 547.

Dace, 159.
Dallas, Mme., 155, 171.
Dalmacius of Gironne, 545.
Damiani, 224, 413, 473, 474.
Darget, 152, 480, 481, 484, 558.
Dariex, 33, 120, 297, 413, 417, 421, 429, 464, 535.
Darwin, 30, 308.
Davane, J., 487.
Davenport, 39, 399, 462.
Davey, 449.
Davies, Mme., 447.
Daviso, Colonel, 146.
Day, F., 140.
Deane, Mme., 480.
Dear, Mme., 575.
Decréquy, 504, 509.
Dee, Dr. J., 200.
Deinhard, L., 177, 509.
Delaage, 118, 119.
Delanne, G., 36, 87, 94, 104, 118, 152, 178, 225, 226, 450, 467, 473-475, 477, 504, 506, 507, 537, 553, 557-559, 575, 576.
Deleuze, 22, 23, 31, 99, 100, 102.
Delorme, 376, 377.
Démadrille, 504, 509.
Demay, C., 296.
Dencausse, 350.
Denis, L., 37.
Dennys, Mme., 339, 340.
Denton, E., 177.
Denton, W., 177.
Derter, 585.
Derudder, 110.
Desbarolles, 184.
Desbeaux, M., 379, 384.
Descartes, 473.
Descormiers, 177.
Desmoulin, F., 81.
Despine, Dr., 115.
Dessoir, M., 21, 93, 223, 439, 440.
Detken, M., 563.
Deupes, Mme., 295.
Devereux, O., 588.
Devienne, 298.
Dhière, Claude, 545.
Dickens, C., 78, 209, 212, 381, 613.
Dickinson, 295, 296, 327.
Diday, 111.
Didelot, 224.
Diderot, 72.
Didier, A., 24, 118-120, 359.
Dingfelder, Dr., 162.
Dingwall, 544.
Dio Cassius, 160.
Divers, 377.
Dombrain, R., 284.
Dominique San Diégo, 546.
Domitian, 160.
Donato, 101, 105.
Don Constantino, 534.
Done, 259, 260.
Dontaz, Abbé, 295.

Dorat, Mme., 406.
Dorian, T., 153, 154.
Doyle, Conan, 146, 347, 382, 484, 613.
Draga, Queen, 5, 159, 166, 167.
Drake, 270.
Drakoules, 198.
Dresser, H., 111.
Drubay, 501.
Duchatel, E., 177, 240, 363, 577.
Duck, Mme., 296.
Dudlay, Mme., 273, 355.
Dufaux, H., 77, 78.
Dufay, de, 105, 117, 179.
Dufilhol, Dr., 368.
Dulley, 367.
Dumas, A., 119.
Dumontpallier, 183.
Dunphy, 495.
Dunraven, Lord, 46, 303, 405, 485.
Dupré, J., 383.
Du Prel, 37, 600.
Dupuy, 377.
Dürer, A., 162.
Durig, Dr., 438.
Durville, H., 585, 586.
Dusart, Dr., 106, 226.
Duvanel, A., 153.
Dyne, 297.

Earle, 251.
Ebstein, 456.
Eddy, M., 110, 111.
Edinger, 242.
Edisburg, 370.
Edison, 197.
Edmund, Captain, 300.
Edmunds, Judge, 26, 27, 30, 221, 222, 405, 455.
Edmunds, L., 221.
Edwards, 93.
Eeden, van, 157, 158, 224.
Eglinton, 33, 39, 118, 224, 340, 443, 448, 449, 452, 453, 457, 471, 478, 479, 483, 535-537, 542, 548.
Eichwald, 539.
Einstein, 468, 625.
Eldred, 456, 458, 471.
Elgée, Mme., 339.
Eliza, 140.
Elliotson, 24.
Encausse, Dr., 452, 453.
Erfurt, 539.
Erhardt, Baron, 528, 529.
Erny, 224, 409, 424, 495, 535, 536, 540, 584.
Escolan, 332.
Escourru, Mme., 254, 297, 298.
Esdaile, 25.
Eslon, 22.
Espérance, Mme. d', 33, 39, 43, 226, 274, 399, 443, 457, 458, 471, 476, 478, 479, 492, 514, 538, 539, 542.
Eugénie, 112, 132, 133.
Eugénie, Mme., 309.
Euler, 222.
Euripides, 176.
Eusapia Paladino, 5, 33, 34, 38, 39, 42, 60, 70, 137, 209, 210, 399, 402-404, 410, 412-421, 428, 431, 433, 437-443, 446, 451, 453, 456-458, 461, 463-467, 469-474, 477-480, 483, 488, 489, 492, 496-500, 502, 503, 505, 515, 529, 534, 535, 542, 549, 550, 592, 598, 609.
Eustance, Mme., 259, 298.
Eutyphron, 17.
Eva (see Marthe Béraud).
Evangelides, 221.
Evans, Mme., 330.
Everitt, 298.
Ezekiel, 74.

Faivre, Dr., 102.
Falcomer, 474.
Falcoz, 232.
Falkinburg, 337.
Fanton, Dr., 121, 122, 124.
Faraday, 28.
Farber, Archdeacon, 298.
Farigoule, L., 37, 187.
Fechner, 468.
Féda (see Mrs. Leonard).
Feijao, O., 150, 529-532.
Fénelon, 72.
Fenzi, Sebastian and C., 321.
Ferdinand, Archduke, 386.
Féré, 113.
Féron, 350.
Ferrari, G., 558.

Ferrari, H., 71, 96, 126, 131, 132, 168, 185, 242, 260, 361.
Ferrero, Mme., 418.
Ferrier, 308.
Ferroul, Dr., 121, 122.
Février, General, 377.
Field, 289, 327.
Fielding, E., 34, 413, 418, 420, 472, 535, 544.
Figueroa, G. de, 384, 385, 617.
Figuier, 22.
Filituto, M., 224.
Finzi, G., 34, 413, 416, 417, 464, 497.
Firmin, Mme., 475.
Fish, L., 25.
Fitch, General, 301.
Flammarion, C., 7, 8, 34, 36-38, 106, 115, 120, 195, 252, 254, 262, 269, 277, 284, 286, 290, 291, 294, 295, 297-299, 302, 310, 312, 313, 315, 316, 318, 319, 323-325, 335, 338, 339, 341, 350, 368, 371, 380, 385, 386, 395, 413, 488, 503, 600.
Flanigan, 589.
Flaubert, 162.
Fleres, D., 355.
Fleury, 365.
Fleury, General, 298.
Flint, 29.
Florentine, A., 217, 218.
Florrie, C., 447.
Flournoy, T., 50, 78, 79, 158, 164, 209, 221, 369, 439, 470, 528, 609, 610.
Flourière, 120.
Foa, 34, 413, 418, 419, 464, 535.
Focke, Mme., 337.
Foissac, 23.
Fontaine, F., 546.
Fontenay, G. de, 103, 434, 460, 480, 484, 501-503, 511, 526, 527, 559.
Fonvielle, Mme. de, 298, 299.
Forbes, Mme., 173, 174.
Fortin, Abbé, 435.
Foster, 147.
Fouquier-Tinville, 73.
Fournat, A., 545.
Fournier, G., 168-170.
Fowler, L., 155.
Fox Sisters, 15, 25-27, 29, 39, 399, 424, 443, 454, 463, 471, 479, 540.
France, A., 312.
Francé, Dr., 438.
Francis, Mme., 452.
Frapart, Dr., 119.
Frederic, Duke, 546.
Freer, Mlle., 201, 366, 592.
Frémery, 423, 541.
Freud, 37.
Freudenberg, Dr., 192.
Fréville, Mme., 263, 266, 321.
Freya, Mme., 120, 185, 350, 351.
Frigerio, Dr., 189.
Frondoni-Lacombe, Mme., 150, 477, 529-534, 542.
Fryer, R., 272.
Fulton, 8.
Funk, I., 151.
Furtado, 532, 533.

Galichon, Mme., 297.
Galileo, 8.
Gallet, 178, 376, 377.
Gallichet, M., 392.
Galotti, 500.
Galvani, 620.
Gandy, J., 251.
Gargain, 110.
Garnay, I., 140.
Garnier, Abbé, 385.
Gasparin, 28, 406.
Gaston, B., 299.
Gautier, 295.
Gay, Mme., 300.
Gazzera, L., 39, 46, 400, 432-434, 457, 492, 525-527, 542.
Geley, G., 33, 36, 81, 198, 199, 327, 349, 350, 432, 467, 469, 470, 511, 524, 525, 543, 545, 620.
Gerosa, 412.
Giacchi, Dr., 315, 316.
Gibier, 225, 411, 412, 451-453, 462, 463, 475, 477, 492, 514, 527, 528.
Gielski, de, 545.
Gifford, R., 158.
Gignon, 276.
Gilbert, 106, 125.
Gilbert, Dr., 589.
Giolitti, 153.

Girard, P., 8.
Girardin, E. de, 354.
Girardin, Mme. de, 74.
Gladstone, 224, 453.
Glanvil, J., 563.
Glardon, A., 93.
Glaucon, 16.
Glyn, 536.
Goclenius, 14, 22, 106.
Godfrey, 557.
Goethe, 554.
Goligher, Mlle., 33, 34, 39, 43, 400, 430, 431, 438, 441, 443, 445, 469, 489, 534, 542.
Gollin, 301.
Gomanys, Count, 277.
Gonner, 138.
Goodall, 300.
Gordigiani, 149, 150.
Görres, 20, 21, 546, 547.
Gower, 226.
Grabinski, 386.
Grabow, 243.
Graesse, 3.
Graham, M., 429.
Gramont, A. de, 34, 162, 413, 417, 451, 501, 535, 600.
Grand-Boulogne, Dr., 225.
Grant, 304.
Grasset, J., 37, 67, 78, 121, 122, 159, 167, 200, 202, 285, 456, 462, 463, 504, 510, 589.
Grattam, C., 145.
Gray, Dr., 540.
Gray, J., 583.
Green, Mme., 59, 69, 179, 254, 266, 301, 327.
Gregory, Mme., 555.
Gregory, W., 116.
Griffin, M., 302.
Griffiths, 301.
Grillet, E. de, 375.
Grima, Commandant, 277.
Grimaldi, Dr., 196.
Grocyn, 481.
Grottendieck, 590.
Ground, 484.
Grunewald, F., 28.
Gudden, von, 355, 356.
Guérard, Mme., 314.
Guérin, Mme., 314.
Guicciardi, Mme., 315.
Guinard, Dr., 277.
Gulat-Wellenburg, Dr., 514.
Guldenstubbé, de, 450, 451, 553, 554.
Gurney, E., 7, 26, 33, 35, 87, 268, 456, 557.
Gutenberg, 624.
Guthrie, M., 87, 93.

Haemmerlé, A., 557.
Haggard, 277.
Haggit, 311.
Hahn, 224.
Hall, S., 487, 556.
Halle, M., 303, 372.
Hamilton, 39, 40.
Hanriot, 132.
Hansen, 124.
Happerfield, 219, 220.
Hare, R., 27, 407.
Harford, J., 220.
Harriet, Mme., 335.
Harris, F., 134, 279.
Hart, 138, 271, 488.
Hartington, 349.
Hartkopf, 242.
Hartmann, F., 554.
Hartwig, 394.
Harvey, 253.
Hasden, 557.
Haskel, Mme., 337.
Hatch, D., 80.
Hauer, 372.
Hauff, F., 23, 24.
Hauffe, A., 296.
Haumann, T., 483.
Hawkins, Mme., 556.
Hawthorne, E., 182.
Haxby, 457.
Haye, Dr., 374.
Hayward, 162.
Hazhatt, 318.
Heidenhain, 32, 99.
Heintzer, 164.
Helena, 112.
Hélène, 374.
Hellembach, Baron, 372.
Hendrickson, 556.
Henicke, 355.

Hennings, Mme., 487, 488.
Henry II, 371.
Herdmann, 87.
Héricourt, J., 105, 106, 126, 130, 131, 185, 360.
Herlitzka, 413, 418, 419.
Hers, Mme., 303.
Herz, 624.
Heslop, F., 37.
Heuze, P., 37.
Heymans, 172.
Hill, A., 160, 484.
Hill, M., 261, 309.
Hillenbach, 541.
Hinkovitch, 224.
Hirschberg, J., 194.
Hirschmann, 538.
Hodgson, R., 34, 42, 136, 137-144, 155, 210, 219, 226, 349, 413, 414, 456.
Hofman, A., 192.
Hollaender, F., 197, 198.
Holland, Mme. 174.
Home, D. D., 31, 34, 38, 39, 43, 46, 137, 144, 145, 303, 399, 405, 407-411, 431, 436, 437, 442, 443, 448, 453, 462, 466, 467, 471, 472, 478-480, 483, 485-487, 489, 492, 493, 514, 534, 542, 550, 551, 592.
Hooker, S., 435.
Höping, 184.
Hopkins, 454.
Hoppe, M., 89, 198.
Hornung, E., 28.
Hosmer, Mme., 303.
Houdaille, O., 166, 250, 303.
Houdin, R., 39, 40, 118, 119, 421.
Houssaye, A., 358.
Howard, 139, 211.
Howard, G., 271.
Howard, Lady, 149, 151.
Howitt, W., 390.
Hubschmann, 296.
Hugo, C., 74, 77.
Hugo, V., 53, 74-77, 119, 313, 613.
Hugues, Clovis, 219, 302, 571.
Hulin, 378.
Hulst, d', 546.
Hunter, Mme., 331.
Hurley, B., 330.
Husson, Dr., 22, 23, 99, 104.
Hutchins, 247, 304.
Huxley, 30.
Huygens, Mme., 423, 541.
Hyslop, J., 34, 36, 79, 90, 119, 137, 139-145, 151, 155, 158, 200, 201, 210, 221, 275, 308, 314, 366, 374, 445, 446, 455, 480.
Hyslop, R., 140.

Imoda, E., 46, 432, 464, 483, 492, 525-527.
Irvine, 573.
Isnard, 340, 372, 555.
Istrati, 559.
Ivey, 375, 376.

Jacks, 53.
Jackson, Dr., 561.
Jaffé, 332.
James, 78, 209.
James, W., 7, 33, 34, 137, 138, 142, 143, 144, 151, 270, 388, 468, 600.
Janesson, G., 373.
Janet, J., 104.
Janet, P., 20, 44, 104, 106, 125, 200.
Jansen, Dr., 423.
Jaurés, 159.
Jean, Dr., 304.
Jeanne, 310, 327.
Jeanne d'Arc, 17, 19, 77, 389.
Jencken, 485, 488.
Jerry, J., 138.
Jim, Mountain, 288, 289.
Jobert, 29.
Johnson, A., 102, 173, 174, 262, 393, 418.
Johnson, Dr., 482.
Joire, Dr., 104, 200, 435, 436.
Joller, 585.
Joncières, V., 421.
Joncken, Mme. (see Fox).
Jones, 321.
Jones, Dr., 137.
Jones, Mme. 367, 368.
Jones, S., 182, 263.
Joquelet, L., 358.
Joubert, Mme., 150.
Jouffreau, 231.
Jubainville, d'Ade, 315.

Judd, Mme., 575.
Jukes, 304.
Julia, 357, 362.
Julliard, Dr., 115.
Jupp, 331.

Kaigodoroff, 153.
Kalérine, 138.
Kalua, 141.
Kane, Mme., 26.
Kant, 267.
Kapnist, Countess, 305, 306.
Kardec, Allan, 29, 30, 35, 77, 303, 571, 606.
Karin, N., 446.
Karr, A., 119.
Keep, A., 571.
Keisewetter, C., 21, 28.
Keley, 141.
Keller, 455.
Kelvin, Lord, 7.
Kemnitz, Dr. von, 514.
Kerner, J., 23, 296, 346, 547, 548, 587.
Kerr, Mme., 289, 307.
Kesley, R., 307.
Keulemans, 280, 308.
Killick, 251.
Kilner, Dr., 103.
King, J., 42, 43, 70, 209, 220, 329, 413, 465, 466, 474, 488, 490, 496, 609.
King, K., 32, 45, 220, 413, 461, 467, 474-476, 493-495, 496, 534.
Kingsford, S., 189.
Kingston, Dr., 574.
Kinnaman, Dr., 572.
Kircher, F., 100.
Kirk, 93, 557.
Kitchener, Lord, 582.
Kjelmann, Dr., 128.
Klapke, Dr., 511, 512.
Kling-Klowstroem, C. von, 227.
Kluski, F., 503, 542, 545.
Knes, 337.
Knight, F., 160.
Kobbe, Major, 274.
Kohnstamm, 20.
Korff, General von, 145.
Kotik, Dr., 190, 191.
Kouprejanoff, 584.
Kraemer, R., 290.
Kral, K., 240, 241, 243.

Lacassagne, 559.
Lacombe (see Frondoni-Lacombe).
Lacretelle, H. de, 153.
Lafontaine, 24, 100, 105, 119, 547.
Lagarrue, Captain, 305.
Lagrange, M., 277.
Lamy, Mme., 155, 156.
Lane, Sir H., 171, 172.
Landesque, P., 231, 232.
Lang, A., 33, 200, 308, 369.
Lange, 198.
Langenest, Mme., 307.
Langlois, J., 127, 135.
Lanne, Mme., 314.
Lanyi, J. de, 386, 387.
Laplace, 50, 54, 345, 471.
Larkin, Lieutenant, 292.
Larmandie, de, 582.
Lasserre, H., 111.
Laurent, E., 266.
Lauritzen, 368.
Lavaut, 373.
Laville, Mme. de, 312.
Lavoisier, 8, 14.
Leadbater, 325.
Lebas, Mme., 385.
Le Ber, Mme., 162.
Le Bon, G., 420, 481.
Lebrun, Corporal, 317.
Lecour, P., 491, 492.
Lee, 280, 381.
Leeds, Mme., 202.
Lefèbvre, J., 162, 582.
Lefroy, 122.
Legludic, 115.
Leibnitz, 49.
Lemaire, 160.
Lemaitre, A., 81.
Lemb, 457.
Lemerle, 162, 528.
Lemoine, P., 229, 230, 233, 234, 236.
Lemonnier, 259, 332, 333.
Lenormand, Mme., 24.
Leonard, Mme., 33, 42, 44, 156, 157, 162, 163, 214-216, 361, 612.
Léonie, 89, 104, 125, 126, 127, 135.
Lépine, 381.

Lermina, J., 305.
Lescœur, P., 202.
Lesseps, de, 390.
Lett, Mme., 340.
Leymarie, 28.
Lichfield, M., 273.
Liébeault, 99, 105, 306, 357.
Lightfoot, Mme., 305.
Lillian, F., 583.
Lily, 352.
Linda (see Gazzera).
Lindsay, 90, 480.
Lindsay, Lord, 485, 487.
Linnæus, C., 380.
Littré, 545.
Livermore, 479, 540.
Ljung, 127.
Lloyd, Major, 276.
Lloyd, V., 382.
Locke, 573.
Lodge, Sir O., 7, 33, 34, 36, 86-88, 92, 138, 142-144, 146, 155, 156, 161, 163, 173, 180, 187, 206, 210, 214-216, 219, 223, 267, 292, 328, 383, 388, 413, 415, 417, 439, 440, 451, 456, 461, 464, 465, 468-470, 505, 530, 535, 597, 598, 600, 602, 610, 620, 625.
Lodge, R., 210, 214-216, 218, 570, 610, 614.
Lolla, Mme., 376.
Lombroso, 7, 34, 90, 195, 196, 209, 379, 412, 413, 415, 419, 464, 535, 565, 580, 597, 600.
Longet, 261.
Louis XI, 77.
Louise, 51, 153, 352.
Lubbock, 30, 407.
Luciani, Dr., 549.
Lucie, 475.
Lucilius, C., 80.
Ludovic, H., 198.
Ludovic, S., 187, 195.
Ludwig, Dr., 266.
Luigi, 218.
Lukawski, 355.
Lully, 462.
Lusteneau, 390.
Lutoslawski, W., 4.
Luxmore, 495.
Lydia, 378, 379.
Lydia, W., 190, 191.
Lyon, Dr., 350.
Lyon, G., 515.
Lyro, de, 88.

McCready, 275.
McDougall, W., 33.
MacDonald, 160.
MacLellan, 384.
MacNab, 412, 480.
Mabire, 134.
Machner, 82.
Mackenzie, 152, 295.
Macklin, Mme., 307.
Maclean, Dr., 314.
Maddock, 457.
Maeterlinck, M., 37, 240, 241, 608.
Mager, H., 228-230, 232-236.
Magnan, Dr., 102.
Maingot, Dr., 102.
Majendie, 7.
Makan, 27.
Malgras, 28.
Mamtchitch, 155.
Manceaux, Dr., 323.
Mangin, M., 109, 110, 184, 210, 528.
Mangot, 249, 336.
Mar..., Dr., 183.
Marage, 232.
Marcel, 378.
March, 589.
Marchandon, 358.
Marchant, 307.
Maréchal, Mme., 262.
Marey, 8.
Marguérite, 55, 56, 62, 65, 66, 68, 306.
Marie, 117, 120.
Marie Antoinette, 40, 41, 72, 77, 144, 209, 212, 490, 578, 610.
Marillat, 119.
Marillier, L., 33, 576.
Marks, F., 272.
Marmontel, 365.
Marqué, Dr., 121.
Marracino, 586.
Marryat, F., 37, 492, 495, 536, 607.
Marston, W., 364.
Marston, W., 364.
Martel, A., 231, 232.

Martillet, Mme., 580.
Martin, R., 293, 605.
Martiville, Mme., 267.
Martyn, Mme., 252.
Marzorati, 150, 535.
Maseyk, 390.
Maskelyne, 39, 40, 462, 463, 537.
Massey, 155.
Mastro-Pietro, Mme., 374.
Mathiex, P., 445.
Matthews, 263, 333.
Maury, 20, 256.
Maxfield, 363.
Maxwell, J., 27, 34, 36, 38, 44, 70, 103, 175-177, 197, 227, 364, 366, 413, 417, 423, 433, 444, 457, 464, 467, 485, 498, 501, 510, 511, 535, 587, 589, 600.
May, A. von, 200.
Mayo, H., 116.
Mélanie, 52, 64, 266.
Meneer, Mme., 323.
Menou-Cornuet, 340.
Mercier, Dr., 421.
Mérimée, P., 77.
Mermet, 231.
Méry, G., 435.
Mesmer, 15, 21, 22, 65, 99.
Mialaret, R., 279, 336.
Mielle, 23.
Mignon, 394.
Miles, 173.
Miller, 456, 463, 471.
Milnes, Mme., 580.
Mirville, de, 28.
Mitchell, W., 142, 308.
Mitchiner, 478.
Mitchinoff, 369.
Mittelmayer, 391.
Miyatovitch, C., 223.
Molière, 53, 72, 73, 75, 76, 613.
Monck, Dr., 477, 537.
Montaigne, 219.
Montalembert, A. de, 27.
Montebello, Mme. de, 161, 357.
Montespan, de, 183.
Montluc, de, 371.
Montorgueil, 474.
Montpensier, de, 115.
Moor, Major, 581.
Moore, U., 37.
Moratief, Mme., 369.
Morice, M., 579.
Moricourt, J., 183.
Morin, 28, 270, 271.
Moritz, 307, 367.
Morrison, Mme., 368.
Morrison, J., 308.
Morse, J., 217.
Morselli, 7, 27, 32, 34, 412, 413, 418, 419, 455, 464, 474, 478, 481, 498, 499, 503, 535, 550, 597, 600.
Morton, 26, 27.
Morton, R., 572.
Moses, 72.
Moses, Stainton, 33, 36, 38, 39, 43, 44, 140, 144, 152, 164, 217, 353, 400, 422, 449, 450, 467, 471, 472, 477, 480-483, 489, 492, 537, 549-551, 609.
Mosso, A., 418.
Mouat, 330.
Moultrie, 151.
Moureau, Captain, 324.
Mousset, 485.
Moutin, Dr., 150.
Moutonnier, 157, 452, 611.
Mozart, 53, 81, 162.
Müller, J., 8, 78.
Munro, Mme., 368, 561.
Murillo, 545.
Murphy, 588.
Murray, G., 33, 189.
Musset, A. de, 581.
Muza, I., 355.
Myers, A., 34, 128.
Myers, F. W. H., 3, 7, 17, 19, 26, 33-36, 42, 64, 65, 80, 87, 90, 93, 102, 105, 128, 137, 142, 144, 151, 155-157, 163, 174, 175, 200-204, 214, 216, 219, 226, 258, 268, 271, 275, 292, 323, 347, 348, 355, 372, 413, 417, 420, 447-449, 451, 456, 461, 465, 468, 470, 472, 482, 535, 555, 556, 559, 560, 572, 575, 584, 598, 600, 613, 620, 625.
Myers, P., 366, 612, 613.
Mysz, Dr., 453.

Napier, 381.
Napoleoni, 393.

Nathan, M., 548.
Nègre, 309.
Nélaton, Dr., 298, 386.
Nelly (see Mrs. Thompson).
Nepenthes (see Mme. d'Espérance).
Newbold, 140.
Newnham, 249.
Newton, 544.
Nichols, Dr., 453, 454, 536.
Nicholson, 152.
Nilovitch, 339.
Nivot, 259, 332, 333.
Noel, E., 231, 464, 467, 504-506, 508, 509.
Noell, L., 251, 263, 299, 327.
Noggerath, Mme., 72.
Noizet, General, 115.
Nolte, 374.
Nordberg, 424.
Noriagof, 111.
Norlenzki, 419.
Norris, Mme., 350.
Norton, E., 142.
Notari, H., 353.
Nuti, F., 546.

O'Donnell, Dr., 103.
O'Donnell, Mme., 566.
Obalecheff, Mme., 338, 339.
Obersteiner, Dr., 337, 338.
Ochorowicz, 7, 21, 22, 34, 60, 87, 90, 102, 106, 402, 410, 413, 414, 416, 424, 426, 428, 429, 431, 438-441, 451, 458, 461, 464, 465, 472, 479-481, 483, 491, 492, 535, 559, 598, 600, 618.
Oesterreich, 37.
Ohmus, Mme., 382.
Olchowski, 540.
Olivier, 561, 562.
Olivier, L., 168.
Ollendorff, G., 168.
Ollendorff, P., 324, 325.
Ollivier, Dr., 279.
Olsen, A., 127.
Oporto, 218, 219.
Orléans, Duc d', 200, 289, 326.
Orsi, Dr., 256, 316.
Ossovietzki, S., 208.
Osten, W. von, 240.
Osty, Dr., 119, 122, 123, 135, 184, 357.
Ottolenghi, S., 37, 195.
Ourches, d', 410, 450.
Owen, R. D., 30, 410, 455, 540, 553, 563, 577.
Oxley, 475, 537.

Pagenstecher, 182.
Paget, 259, 263, 273, 340.
Paige, 364.
Paladino (see Eusapia).
Palissi, B. de, 81.
Palladia, 155.
Palliser, Mme., 309.
Paluzzi, 547.
Pansini, 499.
Papin, 8.
Paquet, 309, 310.
Paracelsus, 14, 22, 106, 624.
Parent, G., 278, 310.
Parker, 141.
Pascal, 624.
Pasquier, N., 371, 372.
Passaro, E., 563.
Passavant, 25, 308, 367.
Pasteur, 12, 625.
Paternostro, G., 150.
Paton, L., 37.
Patrizi, Dr., 549.
Paulet, Mme., 358.
Pearson, Mme., 335.
Pease, E., 571.
Pélaprat, 231.
Pelham, G., 41, 42, 139-142, 144, 176, 179, 210-213, 215, 217, 456, 490, 570, 606, 608, 609, 611, 614.
Pelusi, 353.
Pénaud, 248, 336, 337.
Pepper, Mme., 151.
Père, A., 168.
Perelyguine, A., 158.
Peretti, 428, 499.
Périer, C. (see Casimir-Périer).
Perty, 584.
Peter, J., 177, 438.
Peters, V., 146, 214, 215, 535.
Pététin, 22, 23, 119, 185, 186.
Petit, Abbé, 389, 548.
Petit-Jean, 82.

Petrarch, 52, 53, 74.
Peyron, Admiral, 324.
Pfaffer, 24.
Pfungst, O., 240, 242.
Phaneg, 180.
Phibbs, 266, 276, 327.
Philips, 32, 587.
Philostratus, 160.
Phinuit, 41, 42, 70, 138-142, 144, 179, 209, 211, 213, 220, 361, 609, 611, 612.
Phygia, 476.
Pickmann, 94, 195.
Piddington, 174, 175, 223.
Pieron, 310.
Pigéaire, Mlle., 115, 187.
Pigéaire, Mme., 24.
Pigott, 155.
Pillet, 546.
Pineau, 336, 337.
Pinto, S., 530.
Piper, Mme., 34, 41-44, 70, 119, 128, 137-145, 155, 156, 160, 163, 174-176, 179, 180, 205, 209-213, 361, 456, 602, 604, 606, 608, 611, 613.
Planes, A., 368.
Planty, de, 450.
Plato, 16, 450, 551.
Pliny, 572.
Plutarch, 17, 19.
Podmore, F., 26, 37, 143, 268, 455, 456, 482, 571, 592, 602.
Poincaré, 625.
Pompey, 178.
Ponsa, Mme., 530, 532, 533.
Poole, Major, 301, 302.
Popoff, O., 369.
Porro, 34, 413, 418, 419, 478, 498, 550.
Post, 25.
Potet, Baron du, 22, 24, 25, 31, 65, 100, 106, 113, 152.
Prel, Du (see Du Prel).
Preyer, 105.
Prince, Dr., 36, 70, 458.
Prince, W., 38, 381, 484.
Probli, 241.
Probst, 231, 232.
Proctor, J., 585.
Purton, Mme., 329.
Puységur, de, 22, 23, 31, 65, 99.
Pythagoras, 29, 72, 73.

Quillac, de, 510.
Quintard, 226.

R., Mme., 152, 164-166.
Radcliffe Hall, 156.
Radnor, Lady, 149.
Rainaly, 455.
Raines, Dr., 588.
Ram, H., 321.
Ramacharaka, 110.
Ramorino, L., 498.
Ramsden, 173.
Randall, 588.
Rawlinson, 310.
Rawson, H., 92, 93.
Ray, 352.
Rayleigh, Lord, 33.
Reboux, P., 78.
Récamier, 106.
Rector, 140, 164, 220, 609.
Reddell, F., 556.
Reed, E., 350.
Reed, Mme., 306.
Reese, 89, 196-198.
Regis, 195.
Regnault, J., 435.
Reichel, W., 535.
Reichenbach, 7, 24, 101, 103, 104, 181.
Reine, 154, 155.
Reiners, 537.
Reinhard, 23.
Relph, 93.
Rémy, 364, 365, 455.
Renouard, d'A., 132.
Renouard, C., 310.
Renouard, P., 125, 126.
Ribet, Abbé, 546.
Ribot, T., 33, 131.
Ricard, J., 115.
Richardson, Mme., 276.
Richet, Mme. A., 287, 392, 525.
Richet, C., 21, 32, 33, 85, 90, 106, 128, 168, 261, 291, 423, 433, 524, 526.
Rieken, 311, 312.
Riondel, 227, 311.

Rivail, L., 29.
Robbins, 144.
Robert, 138, 158, 452.
Roberts, Mme., 400.
Robespierre, 72, 312, 327.
Robinson, L., 171.
Roch, Dr., 558.
Rochas, A. de, 7, 20, 24, 34, 36, 102, 103, 104, 106, 183, 264, 322, 406, 412, 413, 415, 417, 451, 464, 468, 474, 478, 481, 489, 501, 503, 535, 546-548, 557, 558, 600.
Rochester, 80.
Roger, A., 385.
Romanes, 555.
Roncarini, Dr., 195.
Rondeau, P., 125.
Rorngold, E., 226.
Rosalsky, Judge, 198.
Rosenkrantz, J., 481.
Rostagno, 474.
Rostan, Dr., 356.
Roth, A., 429, 456, 457, 463, 471, 477.
Rougemont, F. de, 407.
Rousseau, J., 73.
Roux, Dr., 91, 359.
Roux, M., 120.
Ruault, A., 106.
Rubens, 526.
Ruggieri, 548.
Runciman, 311.
Ruspoli, de, 525, 527.
Ruth, 120.

St. Alphonso de Liguori, 19, 551.
St. Francis d'Assisi, 19, 546.
St. Francis Xavier, 552.
St. Helena, 19.
St. John, 72.
St. Joseph de Copertino, 19, 20, 546, 547.
St. Marie d'Agreda, 553.
St. Paul de la Croix, 546.
St. Peter of Alcantara, 546.
St. Philip de Néri, 546.
St. Theresa, 19, 546.
Saal, 487.
Sabatier, 34, 413, 417, 498.
Sabin, O., 110.
Sage, 141, 210.
Sagée, 553.
Saint-Simon, 200.
Salles, 120.
Salmon, Mme., 226, 463, 477, 527, 528, 542.
Salter, Mme., 544.
Salvator de Horta, 546.
Sambor, 155, 539, 540, 542.
Samona, C., 36, 73, 362.
Samuel, 174.
Sanders, 312.
Sanglé, Dr., 115.
Sanson, Mme., 104, 106.
Santangelo, Dr., 546.
Santi, Dr., 390.
Santo-Liquido, Dr., 153.
Sardou, V., 53, 81.
Sartoris, Dr., 195.
Sassaroli, V., 395.
Saunders, 561.
Saurel, 385.
Saussure, de, 79.
Savage, M., 351, 583.
Savelli, 393.
Savoyer, 589.
Scarpa, 499.
Scatcherd, 198.
Schakleton, 455.
Schiaparelli, 7, 34, 412, 415, 416, 464, 468, 497, 534.
Schiff, 28, 29, 443.
Schiller, F., 33, 94.
Schmidt, Dr., 547.
Schmitz, Mme., 115.
Schmoll, 134.
Schonelz, 539.
Schopenhauer, 380, 381.
Schotelius, 198.
Schrenck-Notzing, A. de, 34, 37, 188, 197, 413, 417, 426, 432, 438-442, 460, 464, 467, 469, 470, 476, 477, 491, 504, 510-515, 523, 525, 526, 535, 600, 613.
Schtcharoff, 582.
Scott, 573.
Scripture, 10.
Searle, 275.
Seeress of Prévorst, 42, 200, 296, 356, 547, 548, 587.

Segantini, G., 349.
Ségard, Dr., 45, 413, 415.
Séguier, Dr., 118.
Selenka, Mme., 224.
Serboff, 557.
Sérizolles, M., 312, 313.
Sermyn, de, 351, 354.
Serrano, M., 313.
Severn, Mme., 275.
Shagren, Mme., 556.
Shakespeare, 74, 75.
Shaw, 361.
Shelp, 581.
Sherbrooke, 259, 334, 335.
Sherman, 260, 313.
Shilton, 90.
Shirman, 225.
Shirving, 315.
Sidgwick, Mme. A., 326.
Sidgwick, H., 26, 33, 413, 415, 417, 440, 456, 602.
Sidgwick, Mme. H., 33, 69, 102, 118, 155, 163, 174, 175, 294, 347, 364, 365, 413, 414, 417, 439, 444, 577, 584.
Siemiradzki, 413, 416.
Simon Magus, 18, 19.
Simpson, V., 574.
Sinclair, A., 583.
Sings, 314, 315.
Sinnett, 587.
Slade, 33, 39, 411, 412, 437, 448, 449, 451, 452, 457, 471.
Smead, Mme., 79, 221.
Smith, A., 33.
Smith, G., 26, 87.
Smith, Mme. H., 81.
Smith, Helen, 40-42, 50, 51, 54, 72, 76-79, 81, 144, 145, 158, 160, 165, 209, 221, 490, 609, 610.
Smith, J., 251.
Snaw, 454.
Snell, 333, 343.
Socrates, 16, 17, 72, 344.
Sollier, Dr., 113.
Solovovo, P., 408, 456, 459, 470, 472, 539, 540.
Sombreuil, de, 73.
Sonrel, 387-390.
Soothywoode, 583.
Sophie B., 190.
Sordi, L., 535.
Sparr, Mme., 26.
Speakman, Dr., 155.
Specht, Dr., 438.
Spear, M. and Mme., 422, 449, 450, 471, 472, 480-482, 537.
Speranski, 188.
Stanhope, Lady, 390.
Stanislawa, P., 525, 534.
Stankevitch, 556.
Stead, W., 152, 172, 361, 456, 553, 613.
Stella, 42, 51, 52, 54, 59, 64, 74, 135, 143, 147-149, 266, 446, 476, 561, 562, 598.
Stella, Mme., 289.
Stevenson, 560.
Stewart, B., 33.
Stiegler, 541.
Stirling, W., 148.
Stone, 117.
Storia, Mme., 315.
Stout, 541.
Stramm, E., 153.
Strauss, 24.
Strieffert, M., 338.
Stromberg, 274.
Suhr, 123.
Sully-Prudhomme, 336.
Surbled, 435.
Surga, G. de, 162.
Swedenborg, 267.
Swiney, Colonel, 315.
Swithinbank, 276, 331.
Symonds, J., 314.

Tacitus, 18.
Tamburini, 280, 315, 415.
Tapp, 474.
Tardieu, Dr., 387-389.
Tassacher, 37.
Tatin, 128.
Taunton, Mme., 259, 260, 329.
Tausch, 151.
Teale, Mme., 316.
Telechoff, Mme., 247, 259, 338.
Terrien, Dr., 122.
Tertullian, 21, 401.
Teste, 24, 348, 349.

Thaw, Dr., 90, 137.
Themistocles, 596.
Thermotis, 80.
Thiérault, 357, 358.
Thiers, 597.
Thiery, 28.
Thilo, M. de, 316.
Thiriat, Mme. de, 315.
Thomas, Mme., 373.
Thomassin, 501.
Thompson, Dr. J., 197, 295, 296.
Thomson, Mme., 33, 157, 179, 224, 261, 328, 610, 611.
Thomson, 158.
Thoulet, 178, 375, 379.
Thury, 406.
Thyræus, Petrus, 563.
Tieber, Dr., 541.
Tiedmann, 362.
Tiresias, 200.
Tirone, R., 379, 380.
Tischer, 37.
Tischner, von R., 162, 192, 193.
Tissandier, Mme. G., 261.
Tissot, J., 536.
Titus, Mme., 270.
Toeffer, Mme., 541.
Tolosa-Latour, 105, 299.
Tomczyk, Stanislawa, 33, 34, 39, 43, 400, 424, 426, 428, 433, 438-443, 458, 464, 480.
Tonelli, Mme., 275.
Toutschkoff, Countess, 375.
Towns, 340.
Tracy, 362.
Travers-Smith, Mme., 171, 172.
Treloar, Mme., 332.
Trisk, Yza, 150.
Tristan, J. de, 235, 236.
Troitzki, Dr., 188.
Tromelin, L. de, 81, 376.
Troubridge, Lady, 156.
Trowbridge, 142.
Tweedale, 333, 334, 393.
Tyndall, 30.
Tyre, L., 575.

Ulric, d', 318.
Ulrici, 367.
Ulysses, 200.
Underhill, E., 37, 540.
Uranenko, 317.
Urban VIII, 20, 547.
Urysz, Dr., 226.
Usher, F., 88.

Vacquerie, 74.
Valentine, C., 318.
Vallantin, 231.
Vallemont, 227.
Van Loon, Dr., 196.
Varay, 377.
Varley, C., 30, 407, 408, 464, 496.
Vaschide, N., 184, 253.
Vassalo, 478, 498, 535.
Vauchez, E., 483.
Velpeau, 29.
Venturi, S., 280.
Venzano, 159, 413, 419, 474, 492, 498, 501.
Verity, 556.
Verrall, Dr., 174.
Verrall, H., 147, 174, 447.
Verrall, Mme., 44, 137, 141, 174-176, 189, 200, 223, 365, 604, 613.
Vesme, C. de, 33, 146, 159, 220, 221, 240, 241, 395, 423, 511, 528, 535.
Vettelini, 154, 155.
Vianney, Curé d'Ars, 546.
Viaud, 317.
Vidal, 289.
Vidigal, Dr., 117.
Viel Castel, de, 409.
Vincente, 42, 509.
Vincenzo, 525, 611.
Viré, A., 231, 237.
Vitalis, J., 351.
Vivant, 119.
Vlavianos, Dr., 222.
Vogler, Dr., 318.
Volkmann, 495, 496.
Volpi, 559.
Volterra, 277.
Vourniquel, G., 37.

Wagner, 542.
Wahu, 37.
Wales, H., 174, 613.

Wallace, A. Russel, 7, 13, 30, 358, 406, 410, 455, 477, 536, 538, 597, 600.
Wallace, C., 117, 358.
Waller, Dr., 363, 436.
Waller, T., 217.
Wanley, 319.
Warcollier, 98, 108, 180, 193, 194, 258, 363.
Warren, 483.
Wasielewski, 182, 192, 193.
Watson, 160, 550.
Watson, Mme., 179.
Watt, H., 275.
Watteville, A. de, 34, 413, 417, 501.
Weakman, M., 25.
Wedgwood, H., 570.
Weinberg, Dr., 196.
Weld, 259, 261, 338, 343.
Wellington, 323.
Wells, D., 27.
Wells, H., 26, 27.
Wenaud, 305.
West, Mme., 272.
Wetterstrand, de, 105.
Weyer, Mme., 339.
Whately-Smith, 544.
Wheatcroft, Mme., 319.
Wickham, Mme., 263, 320, 335.
Wight, 318.
Wijk, 446.
Wild, H., 140.
Williams, 250, 319.
Williams, Mme., 319, 320, 456, 458.
Willy, S., 439, 441, 443.
Wilson, 270.
Wilson, M., 274.
Wilson, Rev., 252.
Wiltshire, 116, 395.
Wilve, 262.
Wingfield, 90, 93.
Wittgenstein, Prince, 145.
Wolff, 390.
Wood, T., 366.
Wood, Mme., 457.
Woodham, Mme., 257.
Woolcote, Dr., 320.
Woolley, 544.
Wriedt, Mme., 224, 225.
Wright, 271, 320.
Wynne, C., 486.
Wynyard, Colonel, 259, 335, 336.

Xenophon, 16.

Youdenitch, Mme., 540.
Young, Mme., 222, 334, 383.
Yourgevitch, 440.
Yung, E., 360.
Yver, 341.
Yves-Plessis, R., 3.

Zabaski, 539.
Zancigs, 462.
Ziegler, 242.
Zingaropoli, 150, 562, 565, 586.
Zipelius, 373.
Zöllner, 7, 13, 30, 36, 411, 455, 468, 542, 597, 600.
Zoroaster, 81.
Zuccarino, 549.
Zuleika, 363.

WELLCOME LIBRARY INSTITUTE