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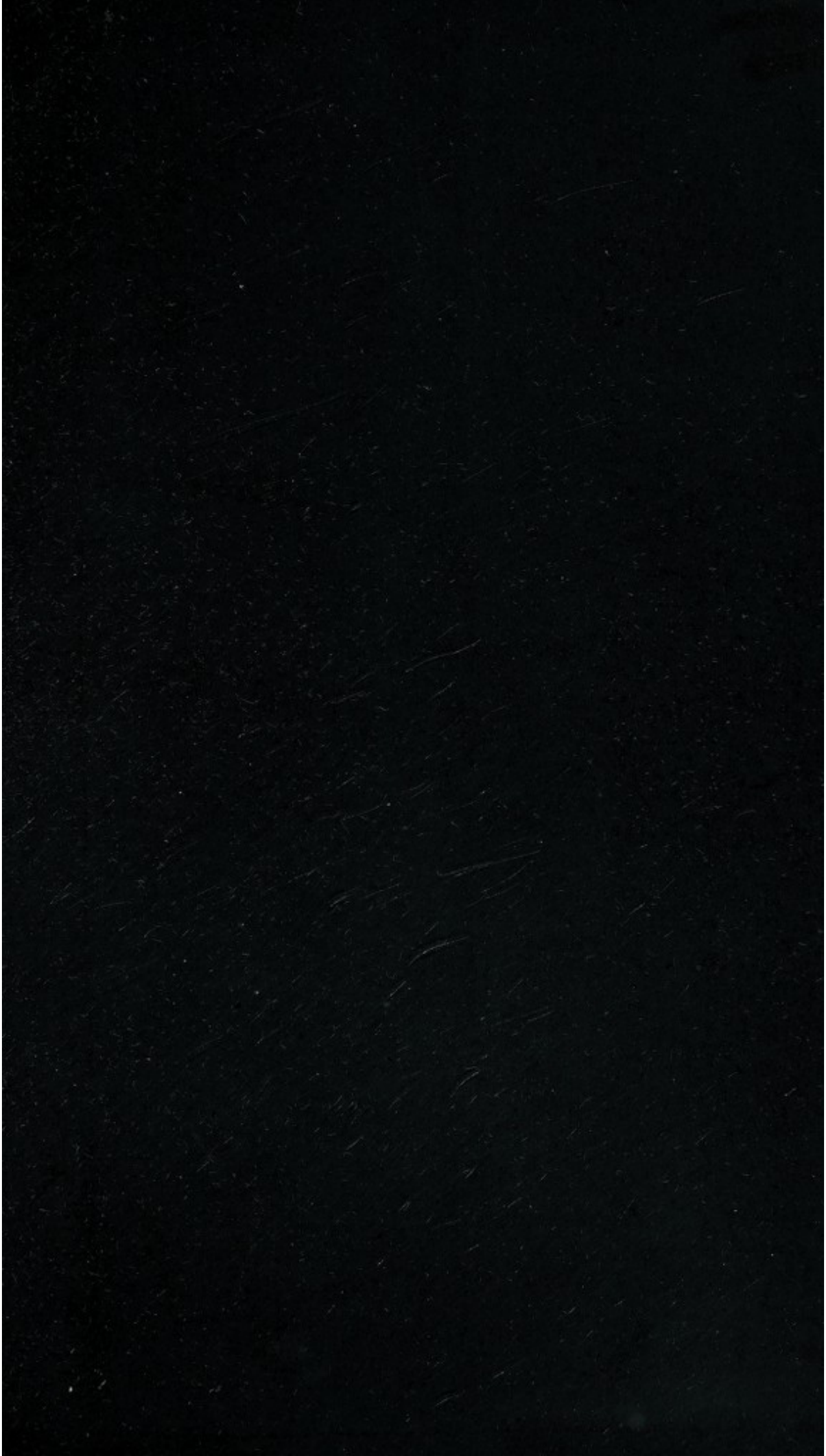
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A HISTORY OF PSYCHOLOGY


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A HISTORY
OF
PSYCHOLOGY

ANCIENT AND PATRISTIC

BY
GEORGE SIDNEY BRETT, M.A. (Oxon)

LONDON
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1912

PSYCHOLOGY: Ancient

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PREFACE

THE development of psychological theory is intimately connected with the development of philosophy. This is perhaps the reason why there have been comparatively few attempts to write an independent account of this department of knowledge, and those few are defective in method and execution. Those who have undertaken to treat ancient psychology have, in many cases, used the term psychology to cover what properly belongs either to general philosophy or to metaphysics, a fault very obvious in the otherwise admirable labours of Chaignet, for example. Excluding the psychological parts of histories of philosophy and those accounts of the development of psychology which include ethical, metaphysical, and logical subjects, the only genuine history of psychology known to me is the work of Siebeck. Praise of this work is now superfluous ; for a quarter of a century it has remained unrivalled in excellence of method, in learning, and in sound judgment ; every writer has owed to it a debt of gratitude, and none more than myself.

As the charge of irrelevance has been brought against other works on psychology, it is perhaps necessary to explain the presence in these pages of material that cannot be called psychology in the strict sense of that term. The inadequacy of the term has been noticed elsewhere (pp. 4–5), but no other single word seemed less inadequate, and the inclusion of alien matter can best be defended by stating what that term is here meant to signify. The following idea has been the criterion in

selecting, and the principle in grouping, the data. The nature of man is regarded as forming the centre of three great lines of interest, namely, the study of human activities as the psychologist sees them, the study of human life as the doctor looks at it, and the growth of systematic beliefs as reflected in philosophy and religion. The union of these in their historical development seemed likely to yield what might be called an autobiography of the human mind.

It is, of course, impossible to combine a comprehensive account of so large a subject with the detailed minuteness proper to monographs on special periods; excision and selection has been necessary throughout. The data included may appear to some badly selected; others will desire things that have been purposely omitted; in view of this it is permissible to indicate what method has been consciously pursued. The main emphasis is laid on what may be called psychological data in the strict sense; around these data are grouped such theories as diverge from the phenomena of consciousness to derivative doctrines of the soul's antecedents, environment, and future possibilities. The relevant parts of medical and religious theories are regarded as supplementing psychology in two different directions; the treatment of them is subordinated to psychology as the main theme. The instructed reader will understand how manifold have been the temptations to digress. Anthropology, dæmonology, and other departmental studies have presented opportunities for irrelevancies more attractive and entertaining than the main theme. The temptations have been resisted if not with good judgment at least with good intentions.

As the subject of this history exceeds the limits of psychology in the narrow sense, I have found ample justification for the consideration of Eastern theories

which would find no place in a history of psychology confined to purely scientific data. In this part of the work I have had to rely on translations and the statements of others, being ignorant of the languages of the ancient Eastern literatures. Fortunately such scholars as Max Müller and his collaborators, in producing versions of the "Sacred Books of the East," have made accessible the required data. As the object of this history is to exhibit the evolution of ideas about the soul, Eastern ideas are by no means irrelevant. They have influenced Western theories in the past, and the world to-day turns to the East in its speculations almost as much as it turns away in its science or its practice. Amid much fruitless revival of empty phrases there is a useful tendency in this; it relieves the painful insistence on motions and mechanism which is our heritage from the eighteenth century. But there is urgent need for a clearer understanding of many ideas, particularly those attributed to Indian sages; for a little knowledge would undermine once for all the fantastic doctrines built on stray quotations from Indian writings. Such ideas as are found in the Vedanta, for example, usually suffer depreciation or exaggeration. In reality the Indian traditions seem to say well what they have to say; both as a phase of history and as a contribution to knowledge they express significant points of view which may be given sympathetic attention without fanatical partisanship. The tendency towards mysticism makes them an abomination to some, while to others it is a recommendation or even a fatal attraction. A recent writer seems to me to have stated the case for these and similar writings in words that exactly fit the present stage of our development. "We in our time are perhaps too much inclined to limit the powers of the human spirit to the world of sense and observation. The slackening hold on faith in a spiritual

world and a higher intuition may well be visited by the proper Nemesis, in the darkening of the vision, whether as religious faith or artistic inspiration. The dream of an earthly paradise enriched with every sensuous gratification by a science working in bondage to mere utility may have serious results for the spiritual future of humanity. It may need a bitter experience to dispel the gross illusion; yet men may once more come to believe with Plutarch that, as it were, at the back of every soul there is an opening to the divine world from which yet may come, as of old, the touch of an unseen hand."

The history begun in these pages will, if possible, be carried on through the succeeding centuries in a study of the development of man's knowledge about himself and the influence of that knowledge on his conduct and his beliefs. In reference to the period treated in this part of the whole scheme, one point calls for special comment. There is a perilous affinity between studying the history of psychology and treating the records of the past psychologically. The psychologist may take those records and reinterpret them; he may, for example, explain how far alleged visions were hallucinations or alleged possessions were diseases. The business of the historian is to record rather than interpret. He should confine himself to giving such interpretations of these phenomena as were actually given by writers contemporary with the events, and so presenting the views of both the believers and the sceptics. In cases of religious experience this is most important, for we desire to understand first what they signified to the people who believed in them rather than what they signify to the people of to-day. A history of psychology must not anticipate; it must be a record of beliefs about the soul and of the growth of the human mind in and through the development of those beliefs. Here if anywhere the fundamental axiom is that

the evolution of thought is part of the whole evolution. There may ultimately be no evidence that any human powers have been atrophied or otherwise lost; there may be no ground to believe that any age has had spiritual possibilities greater than our own; but in the process of collecting the data for such judgments it would be a fallacy to presuppose the conclusion.

G. S. BRETT.

UNIVERSITY OF TORONTO,
July, 1912.

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ERRATA

p. 71, line 13, *for* "Timæus," *read* "Republic."
p. 71, line 18, *for* "Republic," *read* "Timæus."

PART I

A HISTORY OF PSYCHOLOGY

CHAPTER I

THE CHARACTER OF PRIMITIVE THOUGHT

§ 1. The evolution of thought has followed a course not unlike that which the ancient philosophers described when they traced the genesis of the world out of chaos. As the ordered world arose out of a previous chaotic condition of matter, so experience began with a chaos of facts, a distinctionless mass of data. From the first, man set himself the task of putting his house in order, and under the direction of immediate interests the mass of known facts was slowly sorted into classes; as the cosmologist would say, it was separated out. The lines upon which we may suppose this progress to have been made were those of specific interests, and the process itself cannot be regarded as undertaken with any idea of acquiring knowledge for its own sake but always in the hope of being able to make life easier and more pleasant. The first categories or heads of classification which man would use would not be the categories of science but of practice. Thought at this stage must have been chiefly employed in preserving all that a man considered worth preserving, primarily his own life and after that the life of those whom he loved or the property toward which he felt an affection not unlike the sentiment of kinship; so that his first categories were

those of action, rough classifications of things as harmful or harmless, eatable or poisonous, to be avoided or pursued, to be cherished or destroyed.

Such a condition of things presents itself to us as a chaos of unintelligible facts: but we must not hastily suppose that the primitive mind was in any way conscious of the defects of its knowledge, except in so far as there were disappointments in practice, and a sense of helplessness in facing situations that baffled the mind by their novelty. On the contrary, primitive man was singularly definite in his attitude toward the universe of his actions; he was hardly, if at all, conscious of a need of any agreement between the different parts of his knowledge, and consequently retained his hold on this or that line of theory with small regard to other departments of speculation. The reflective attitude which desires to unify knowledge under the least possible number of headings or even find one category to include all, was a condition of thought only slowly evolved through a long period of time. We need not expect, therefore, to find that the thought of primitive man is hazy, though it is undoubtedly confused in the sense that it presents to us no definite scientific treatment of facts and no scientific ideal. Knowledge comes before science, and science grows out of knowledge by the progressive specialisation of knowledge. Psychology is itself a science that has been evolved out of a crude mass of thought by a slow process of specialisation. If we try to define the meaning of the term, no one phrase will cover the significance which the historian of psychology wishes to give the word. The word "history" in its modern use presents a close parallel; from its former wide significance of "narrative" it has narrowed till it indicates only the account of one department of human activities: the wide range of material which a Livy or a Pliny included under the idea of history has been divided up and allotted

to many sciences, leaving only a fragment to the historian proper. In a manner closely analogous to this the term " Psychology " has been narrowed down until it signifies but a small portion of what could legitimately be ranked in any ancient times as " theory of the soul." The definition of psychology which we should expect from a writer in this century would show us at once the degree to which the " soul " of his science is not the " psyche " of ancient days. From the historian of psychology no definition need be required; history alone can adequately unfold the content of the idea denoted by the word " Psyche " or explain the various meanings that have from age to age been assigned to the phrase " science of the soul."

It is impossible to indicate exactly the time when the soul became a specific object of study. The origins of psychology are lost in that general confusion in which the origins of all things were mixed together and no one of them was distinct. To the body of knowledge existing at this stage of mental development we may assign the name Anthropology as indicating the time when there was a definite interest in man but only an indirect interest in the soul as one of the parts of man. Psychology will then be understood as arising out of anthropology by that process of specialisation which we have already mentioned, and the first stage of its history may be called the anthropological period as including popular views of the soul prior to the awakening of a scientific spirit.

Although these sections are intended to be merely an introduction to the history of psychology, it would be a mistake to limit them to a bald statement of the few facts about the soul which can be gathered from surviving records. The value of primitive records does not lie in the number of facts which they mention, but in the spirit which they indicate; for the facts are neglected or superseded, but the spirit remains to influence succeeding

generations, either by inspiring a yearning for inquiry or barring the roads with an authoritative prohibition. Our first duty then is to place ourselves at the point of view of the times to which our earliest records belong and begin in the true historical way to follow the footsteps of mankind.

The idea that thought may be exercised for the sake of thought comes late in the history of man; primarily all thought is for the sake of action or feeling. In so far as primitive man is controlled by interests which compel actions, his mind is employed in the discovery of ways and means by which ends may be attained; on the other hand, there is no record of the human race which does not reveal traces of interests that are not of this kind but belong rather to the idea of play as opposed to work. Life was divided into periods of strenuous activity and periods of quiet repose; there was rest for the weary and labour for those that had rested; a time to dig or plough and a time to talk over what had been done or remained to be achieved. The world was a place of action, and the things it contained objects of action; action is motion, if looked at from the merely sensible standpoint. But a movement has interest only when it seems intended to achieve some result; man is himself conscious that his own movements have a character derived from his intentions; and he is quick to judge a movement as expressing some possible intention. In this way two distinct aspects of the world are fused. On the one hand, the broad sweep of thought interprets the world through the idea of movement; man appears as one moving thing among others, an object only partly distinguished from nature at large. On the other hand, nothing is quite so well known, so familiar, as the fellow-man; we know his little tricks and devices better than anything else because they are so singularly like our own; and therefore the riddle of

the universe seems soluble only if we can penetrate to the ideas, the purposes, which natural phenomena must express. Without formulating any idea of an end or purpose which the world works to attain, man instinctively reads purpose into motion.

Anthropology in the sense in which it is here used denotes a discourse about man. It presupposes nothing but an interest in men as creatures coming into contact with one another. Man is neither God nor beast, but it is easy to pass from him to either; the enemy ready to slay is not far removed from the beast that would devour; the strong man rescuing the weak is not far removed from the God that stoops to save. From this central datum, man as we know him, endless lines of thought run out to the very periphery of human life. In countless ways man must be judged that there may be preparation to welcome the friend or expel the enemy; not only judgment is exercised, but also feeling for those that stir affections of love or hate, and to those feelings are added emotions and the tendency to act; while memory retains its image of those who have passed beyond the reach of our actions.

§ 2. If we look to our records we find these different phases of thought clearly represented. A vivid interest in man as a living creature dominates the activity of thought; men talk *to* themselves and *about* themselves; describe exactly where this or that pain was felt, what passion excited to this or that action, how the visions of the night brought back the past or revealed the unknown. Limiting ourselves to the data with which our subject is concerned, we can classify these according as they belong to the sphere of (*a*) interest in the living, or of (*b*) interest in the dead. Interest in the living gives us (1) a rudimentary localisation of feelings, a phrenology of the human organ-

ism; and (2) a rudimentary classification of functions. Interest in the dead produces a somewhat more complex result which cannot be summarily described.

(*a*) The first object of interest to man is not the soul but the person, and the person is primarily the body. The interest which controls action has little concern with the soul; it is the body that comes into the sphere of action as that which may be caressed or hurt in life, adorned with garlands or dragged behind the chariot after death. There is no proof of the frequent assertion that ideas about the soul rose first from the unusual phenomena of hallucinations or dreams; man does not require the unusual to arouse his wonder, and if he did there would still be no proof that he regarded dreams as in any significant sense unusual. Such as we have it, early psychology is merely a way of interpreting other men's actions by analogy with one's own motives and intentions. To this process of constructing the other person's inner self as an "inner man," all those phenomena which seem to present new aspects of this "inner man" contribute continually; but the primary interest is always in the person either as the subject of his own thoughts or the object of another's actions. No emphasis should be laid on anything that would now be called "abnormal" until we have a sufficiently explicit system of ideas about what is normal.

Some of the most elementary facts come naturally from man's interest in his own feelings. Only from experience can a man derive the idea that the heart is the seat of courage, and this identification of feeling with one particular organ is perhaps the first attempt at locating the seat of any psychological affection. In a somewhat less definite way the sensations of the central portions of the body, vaguely defined as the diaphragm, were put into one class, so that the word φρένες could be used to indicate a condition of feeling (e.g. desire) or

volition or even cognition. The inclusion of the latter will not seem so strange if we remember that thought is never quite distinct from feeling, and as an actual event in a life a thought has a prominent element of feeling which might well be regarded as a diffused organic affection.

It was just as possible and natural for man to speak of different parts of his mental activity as it was to distinguish parts of the body; there was no necessity to unify the two points of view, and, in fact, little or no relation existed between them. As one man might be renowned for physical excellence, so another might be pre-eminent in devising useful weapons or those counsels of guile which are the glory of diplomacy. The strong will, the fiery spirit, the crafty mind, all appear as types of men, and therefore break loose from their connexion; out of these types was evolved the idea of separate faculties resident in the body. Beyond these broad distinctions nothing further is indicated.

(*b*) For the problem of the life after death man had no solution which he could derive from his own experience. Consequently analogy plays the greater part in the construction of that future state. The impulse to try to solve the problem comes from native curiosity, the impossibility of quite believing that anything ends in nothing. As here more than anywhere human interests enter, there is also the element of wish which fathers many thoughts; it is not only what men must think, but also what men must hope that is the groundwork of speculation. The idea of a future life belongs mainly to the sphere of religion; but psychology is concerned with it in so far as it involves beliefs as to the nature of the soul. The extent to which the idea calls for treatment in a history of psychology is strictly limited by the degree to which the notion of the soul is formed with reference to it. Among primitive peoples the event of death furnishes the means of

deciding what a soul must be as distinct from the person in whom soul and body are one; it is a crisis which compels us to recognise that what was a unity is no longer such. The person as we knew him is changed; he will "fear no more the heat o' the sun"; he can neither harm nor help; he cannot be helped or harmed; an intangible something is gone, and the person has ceased to count. In Homer it is obvious that there are two lines of thought that diverge from the observation of death. On the one hand, the person as an object of sense remains; the body is still what it was, except for loss of breath in cases of peaceful death and loss of blood in cases of death by wounds. On the other hand, the person as active or an object of actions has disappeared, gone, and of course gone somewhere. So while it is the man himself who is left on the death-bed or the battle-field, it is none the less impossible to think that in going from us the person has not gone elsewhere. What that other place is only imagination can tell us; but the nature of the person inhabiting it is revealed directly. Here the dream or the hallucination furnishes that analogue of the person which exactly fits the requirements.

While there are no means of determining the exact extent to which a phenomenon can be regarded as "abnormal" at any given period of history, the student of anthropology soon sees that in primitive times there were so few rules that it was impossible to have many exceptions. The only real criterion which seems to be offered is in the extent to which expectation is thwarted. It is hardly possible to imagine a time when sleep was regarded as strange, and it is evident that trances or death were looked upon first as kinds of sleep. It is when the sleep continues beyond all expected limits, when the voice fails to reach the man or the hand to rouse him, that a new feeling comes into the heart of the comrade, a consciousness

of something that requires another treatment and a situation that calls for unusual action. So in the other case, when the man recovers from deep dreams, or a trance, he comes back to the world as one that returns from a far land, or he tells his friends that he has been in the company of those whom he never expected to see again. The feature that makes the " abnormal " is always its tendency to contradict a more or less conscious anticipation. In process of time that which is normal drops out of view, as the beating of the heart is no longer noticed when the sudden fear has vanished ; and so theorists are apt to consider the " abnormal " the root and origin of all thought over the whole range of the subject. This incorrect view must be eliminated from the history of psychology. Our records show a different mode of development and indicate that there grew up out of natural interests in men and things, interest in oneself and in other members of society, a large mass of ideas which can be claimed as psychological. For this degree of development the " abnormal " was not required ; only when men began to construct beyond the limits of experience did they turn round and grasp at all the detached fragments of dreams and visions.

It is so natural to think of the savage constructing Paradise out of his dreams or projecting a life beyond the grave at the instance of visions, that we forget sometimes how essential it is to find some motive for this proceeding. Dreams and visions furnished nothing but material for imagination ; the driving force which made men cross the threshold of life was a combination of the natural constructiveness of the human mind, its irrepressible tendency to speculate, and the desire for what has been and is not. Fundamentally these are the same ; a man feels the loss of a comrade as he feels the loss of a limb ; and as his mind still works as if the limb were a part of his active self, so in the wider sphere of self and others there is the

tendency for the mind to continue thinking on objects to which no reality any longer corresponds. At the very primitive stage this probably does not last long; the corpse is put out of sight and the person out of mind; but it is an extremely interesting feature of the history of mind that it shows a constant ratio of worldliness and other-worldliness. The more enlarged and refined is the conception of the world of action, the more complete becomes the projected world of rest. Consequently the earliest records show a very highly developed parallelism; for the stage of quick forgetfulness was too inarticulate to leave any records. Fluctuations and divisions of opinion accrue as time progresses, but even the utter denial of a life after death is a product of thought that has always had a contemporary opposition; and, as we shall see, the mind of man loses in time the power of expressing itself wholly in each individual, and is expressed in full only by means of all.

Two distinct questions emerge here: (*a*) one is what can we think, the other (*b*) is what can we do, in the case of the dead? The answer to (*a*) is at first very vague; anything that is thinkable at all seems easily brought to bear on the question, and the result is an uncritical reduplication of this life. In the case of (*b*) the answer fluctuated in a rather peculiar way; the answers being, of course, formulated in cults of the dead. The earlier attitude of mind is that of yearning tenderness making its offerings with remembrance of each little like or dislike; to this there succeeded a period of distrust when the last rites were regarded as finally severing the communion of the dead with the living; but this was soon overcome by the more satisfactory idea of possible intercommunion after death. In primitive religion we find the relation of living to dead is almost always interpreted as a matter of actions; the burial rites secure the comfort of the

dead, while the cult of the dead secures the good services of those that have reached another world and attained other powers. Psychology, as opposed to religion, tends to be more critical. In the Greek idea of Hades all the details of minute observation are somewhat mercilessly embodied. The first point observed is the contrast between dead and living, between full-blooded action and the pallor of the corpse ; when the soul goes forth from the body it leaves behind the bloom of youth and the strength of manhood ; its existence is henceforth vain and ineffectual, adorned only with that crown of sorrow, the remembrance of past joys. In the Odyssey, Hades is peopled with ghosts, and Achilles describes pathetically the sorrow of the dead ; he has his due rank and station among the dead ; there is justice in those passionless realms ; but the hero declares he would rather be the poor servant of a poor master than a prince ruling in this kingdom of shadows. Primitive visions of the life after death have much in common ; they tend to be duplications of the life on earth, with varying estimations of its value ; the Greek is almost alone in the belief that both for the good and the bad the future life is equally undesirable. The reason seems obvious ; a shrewd and practical calculation of what is to be gained by dying leaves no balance on the side of profit ; only a different spirit, more akin to religious fervour than to level-headed calculation, could supply man with a vision of attaining the heart's desire through a process which prima facie seemed to be a mere ebbing away of all that was desirable. That difference of spirit comes when the idea of death as the gateway of life passed into Greek literature.

We can now complete our description of the soul as it appears in early Greek writings. Dreams and visions and the reconstruction of a shadow would continue to enable the observer to interpret afresh the human person.

In death the soul goes forth and is a wraith, a shadow of the person, and its voice is an attenuated sound, the shadow of a sound. It is, however, always material in the sense that it is composed of parts and has extension. However, in some cases it seems to return, as after long trances. As the man is at death divided into body and soul, outer and inner man, it is natural to reconstruct the idea of a person and come to recognise that he is not merely a moving thing but a thing moved from within, moved therefore by that inner man which is self-moving.

On the very border-line of psychological inquiry comes the question of the immortality of the soul. In so far as the belief is held on ethical or religious grounds it does not concern us, but sometimes psychology seems to furnish a proof. In the Homeric period life in Hades seems to have been accepted as without limit. Immortality did not mean continual existence somewhere, but continual existence in the world of light—the upper world. The eternal gods were not spirits in the same sense as the dead. They had eternal life, not eternal death, and this life eternal was obtainable by man in one way only, by eating the food of the gods. As the earthly life was dependent on nutriment, so the heavenly life was the result of being nourished on the food of the spirit, on ambrosia and nectar. The gods confer immortality by giving to man the food that nourishes the soul. There is no question of translation or of the magic touch that makes deathless. The idea is grasped concretely, and man is granted the power of continuous living if heaven reveals to him the diætetic secret of immortality.

Looking back now on what we have called the anthropological stage, we can see three lines of interest definitely beginning to unfold. They are (*a*) man's interest in himself producing ideas about feelings and their relation to the body ; (*b*) man's interest in the qualities that make

for success in social life producing ideas about mental powers or faculties of the understanding; (*c*) man's interest in the life hereafter. These co-exist more or less loosely associated, but the last tends to influence strongly the two former in the direction of compelling man to form a clearer idea of what the soul is in itself, and then where it is in the body and how it can control the whole body without travelling from part to part, and how finally it can itself have parts or be said to have no parts.

CHAPTER II

SCIENTIFIC VIEWS AND RELIGIOUS BELIEFS

§ 1. From one point of view all sciences are one science, the science of one universe. But from another point of view the sciences are manifold. Between the two hypothetical points, that of a world of objects regarded as containing implicitly a unity and intelligibility of its own and that of the same world transformed by the activity of thought into a system of knowledge, there lies all the process of reconstruction whose recorded steps make up the history of human thought. So long as that reconstruction remains incomplete, the sciences can only be called one science hypothetically and in terms of faith rather than knowledge. For practical purposes the sciences tend to become more distinct rather than more united as knowledge progresses. As each province of inquiry advances in accuracy it demands from the student more specialisation and greater elaboration of detail. The result is what we have called progressive differentiation, which implies increasing discrimination of all that is at first vaguely and crudely conceived as forming the content of any particular science.

It is an error to suppose that observation begins with details: the truth is rather the opposite. Observation begins with broad outlines: whenever that which appeared to be one is found to be really two, a step is taken forward toward the goal of understanding. With the continuance of this process comes the necessity of defining afresh the sphere of each science. In the beginning there

must have been observation, and facts tend to form certain groups before reflective thought turns round upon them and examines their character.

As many memories produce one experience, so many observations produce certain primary views of the world each with its own centre produced from the nature of the material, a precipitate of thought rather than a purposive construction. Thus the primitive mind is occupied at first with the most patent and impressive objects. It regards the sky and sea, the broad face of the heavens, the changes of the seasons, the arising and passing away of generations. Its thought is like its people, gigantic, crude, and unrefined. Grandeur cannot fail to enter into such thought, but it is the grandeur of rocky outlines worn by natural forces, lacking in the refinement and detail of the sculptured statue. At such a stage thought is naturally cosmological; it is far removed from any notions of subjectivity, and looks out upon a world partly animate and partly inanimate with a strong tendency to interpret nature from a human standpoint, in the manner characteristic of animism.

Animism does not imply a subjective standpoint in the modern sense of the term subjective; it implies rather a failure to distinguish the subject from the object, the self from the not-self; and this failure makes consciousness dim with the knowledge of men's own modes of activity which, thrusting themselves in between him and the world upon which he looks, distort and blur his vision. The scientific pursuit of actual facts presents itself as a corrective for animism, but naturally the animistic mode of thought dies with a greater struggle in psychology than elsewhere, and, as we shall see, the theory of the soul retains it to a very late stage.

§ 2. To the Greek thinker of the sixth century before

Christ the human being appears to be a peculiar modification of certain universal principles. He is matter primarily, and as such is part of the material world. He exhibits modes of motion which are, sometimes at least, initiated from within. Above all, he shares with other animate beings the peculiar quality of being alive. Now as regards the matter or stuff of which he is made, this must ultimately be the same as the matter which appears in other forms throughout the world; the same, in fact, as ultimate matter. What this ultimate matter is we do not at present inquire, and certainly do not oppose matter to spirit as though these two were by nature hostile. With a singular openness of mind the first inquirers were prepared to take into account all phenomena in their attempts to define the ultimate stuff of which things are made, and consequently include among those data what they conceived to be qualities of the soul. There is therefore no hard and fast line of distinction between soul and not-soul. The popular analysis of nature as containing four primary qualifications or states—earth, air, fire, and water—provides a starting point. Either one of them is really prior to the others, or there is some other thing or condition of things prior to them.

The early philosophers, and especially the Ionian school, are frequently described in a way that lays far too much emphasis on the cosmological point of view. They were indeed "physical" philosophers, but the title includes what we should now assign to the student of physics, of medicine, and of physiology. The decisive factor in the choice of a "first matter" is frequently some biological observation. The world is the macrocosm; man is the microcosm, and the one explains the other. We know something of the medical teaching of the time, and the idea that man was the universe in miniature was

clearly expressed; it is necessary also to recognise that the plastic substance of Thales or the air of Anaximenes were chosen by their advocates for reasons that refer primarily and directly to the life of man. If the historian of philosophy can afford to neglect these indications, the student of psychology must insist on the influence which is exerted upon the most comprehensive theories by those who study in a philosophic spirit the phenomena of daily existence. Man discovers that he is part of a universe; that his very nature and disposition are subject to laws and can be treated as universals; that training, dieting, and habituation make him master of himself. These discoveries produce, in reflective minds, the concept of a world which is the expression of laws, not abstract decrees but regular forms of action, principles involved from all eternity in the being of things. The word "cosmic" tends to become vague in the mouth of mystic writers. For the Greek there was no vagueness in the idea of all-pervading order; the universality never dissipated the possibility of immediate practical application; on the contrary, the idea was a perpetual source of practical deductions. This is clearly seen if we pay sufficient attention to the spirit in which ideas, now very commonplace, were first put forward. To the student of human nature, apparently so spontaneous and original in its manifestations, it must at first have been a great revelation to realise that behind this complex being there was a world of elements, and that the very nature of man, his temperament, passions, and thoughts, could be controlled by those who knew the secrets of climate and food. It is not the specialist curing a disease that comes before us with these theories: it is rather the speculative mind attracted by the widest notions and capable of seeing man as a product of great forces; it is the philosopher who speaks of diet and regimen, believing that he finds in these

the elements of good living, of bodily health, and spiritual purification. If we are to understand rightly the relation of psychology to philosophy we must take into account ideas as widely divergent as those of the Pythagorean philosopher and the practising physician. Only in this way shall we see how really complementary are the varying points of view. Climate and disposition, food and morals, the humours of the blood and errors of thought, these are the terms in which the relation between macrocosm and microcosm are continually stated and re-stated.

§ 3. For the reasons which led to the birth of scientific thought in the seventh century B.C., we must refer the student to histories of philosophy, and be content here with a passing notice of the new attitude towards the problems of the universe. The novelty of that attitude consists in the definite way in which an attempt is made to explain all things on the basis of one principle. The attempt was premature, and the loose unity attained by taking out of the whole one element and trying to bring all change under the formulæ of its changes, was quickly resolved again into a plurality ; the science of the cosmos broke down beneath the mass of the material and was disintegrated into many sciences ; the primary breadth of view was only possible when the detail was scanty and no cosmic view was possible in later ages until the standpoint was changed and scientific principles took the place of physical " principia."

For the history of psychology the so-called " physical " philosophers of the early Ionian school form little more than a dim background. No detailed work of importance can be ascribed to them : they draw their picture of the universe in broad lines and their language is cosmic in its scale. They might indeed be left unmentioned if our

interest was confined to detail, but no small part of the educational value of history lies in tracing the actual course which thought has taken in its progressive unfolding. The views of the earlier thinkers show in this case how the mind of man moves downward as well as upward—downward from the comprehensive universal, and upward from detail to that same universal restored in concrete form with its content more perfectly known.

From Thales we learn nothing distinctly psychological. His choice of a plastic material akin to water as the first substance involves the doctrine that man is ultimately of this nature, and consequently human life in all its forms must be described as activities of this substance. Possibly there was in the mind of Thales the idea that human action is a distinct species of action, that soul or life has to be defined in terms which express some distinction between human action and the movement of the river or the stone; but as there is here no distinction of spirit and dead matter, as there is, in fact, no idea of matter as dead, we cannot safely attribute to Thales any precise views.

In the doctrines of Anaximander and Anaximenes there is much the same vagueness. Their respective theories of the nature of the universe admit certain deductions, and in this way can be applied to the soul. The "Boundless" of Anaximander is philosophically more important than the "Air" of Anaximenes; on the other hand, Anaximenes furnishes more material on the idea of a soul. For his theory of the Air returns to the less abstract view of things: it is less brilliantly speculative, but more closely related to the immediate data. The problem of unity, naturally taken at first as material unity, seems to have been grasped by Anaximenes as a functional unity. It must have been observed at an early date that the self-moving thing is a unity in a particular sense,

what we should now call an organic unity. From this point of view Anaximenes speaks when he says that the soul is air, because air seems capable of pervading every part, inserting itself between the grosser parts and holding them together. How this Air manages to hold together other elements, we are not told; it was an intermediate nature and so seemed to satisfy the requirements; and if the position is not perfectly clear, it is at any rate a mark of interest in the nature of a living organism as such. True to the methods of his day, Anaximenes ascribes to the individual and the whole world the same organic unity and the same method of maintaining its existence.

§ 4. The history of the Ionian school is continued in Heraclitus, while the theory of Anaximenes was developed by Diogenes of Apollonia. It will be necessary before speaking of these to notice another school of thought which exercised great influence on later theories of the soul, namely, the Pythagorean school. The doctrines ascribed to the Pythagoreans fall into two classes, of which one is closely connected with the religious traditions, while the other may be called scientific.

(*a*) The speculations of the philosophers did not exhaust the opinions of mankind on questions concerning the soul. In the Orphic traditions there is evident trace of the preservation of popular ideas which had been steadily maintained and handed on from generation to generation, a legacy from the earlier days of the Homeric poems, or from the still earlier times which seem to be indicated in the poems of Hesiod. In this more popular substratum of opinions we find beliefs that have no scientific origin or support; they make no pretence of a theoretical justification, but represent the systematised ideas which developed out of superstitions and are maintained, with a continuous purification from grosser ele-

ments, by the priests and religious authorities. For reasons entirely outside the range of scientific observation, the Pythagoreans, adopting the Orphic tradition, maintained the transmigration of souls. This idea is significant in two ways: it definitely implies that the soul exists apart from the body, and it opens up the way to a rational psychology which gives independent value to the soul on the ground of metaphysical or ethical problems; for these appear to have no solution without the idea of a soul endowed with a life of its own. The doctrine involves a dualism, for the soul is a thing dwelling in the body, a captive in the garrison, or a prisoner in the dungeon. It follows that there is no organic relation between soul and body, and the naturalistic tendency which moved toward the idea of a soul which resulted from the constitution of the body was, under these influences, entirely checked. It is out of the belief in a future life that this dualism springs, and the mystical doctrine that the body is the tomb of the soul becomes, through Plato, the basis of all the psychology that admits another life, whether obtained by transmigration as in Orphism, or by resurrection as in Christianity.

(*b*) The scientific character of the work done by Pythagoreans seems to have borne fruit in other directions by diffusing a spirit of exact inquiry. To Alcmæon of Crotona we owe the first treatment of the human organism which is in any sense based on direct scientific work. How far his theories were guesses and his methods crude will be apparent from the account of them; but it will be no less apparent that he marks a great advance upon all previous theories in exactness and concentration. Alcmæon belonged to the school of doctors established at Crotona. As a doctor his attention was naturally directed primarily to physiological and biological facts; and with Alcmæon begins the long history of the influence which

a study of the human organism has had on theories of the soul, sometimes for better and sometimes for worse. It was hardly probable that at such a time a speculative mind would be free from a tendency to false analogies. We find these clearly indicated, and it is therefore all the more creditable to Alcmæon that he made a direct study of causes, perhaps even to the extent of practising dissection. From his observations of the human organism he formulated theories of the structure and functions of the sense organs; in the case of the eye, observation seems to have been attracted first by the presence in it of fire and of water. The former is discovered through the sensation of light, obtained by striking the eyeball, the so-called "intraocular light"; the latter is obvious to ordinary inspection. This intraocular light was not considered to be in any sense a subjective phenomenon; it was supposed to be the action of fire enclosed in the eye which is surrounded by diaphanous sheathes that keep in both fire and water. In order to give both these elements a function vision is explained as a combined process of reflection and radiation; reflection gives an image of the object in the watery element of the eye, while radiation is an activity of the fire directing a ray outward to the image. Similarly in hearing, we have a twofold process: the moving air conveys the sound to the vacuum contained in the ear. This vacuum, which is really a chamber filled with air, mediates the passage of sound, for without it the air and not the sound would be transmitted to the brain. Upon the other senses—smell, taste, and touch—Alcmæon has nothing to say beyond what ordinary observation would suggest. It is interesting to observe that he explains sleep as due to the retirement of the blood into the larger blood-vessels.

So far our results seem to be purely scientific, but there is another side to the character of Alcmæon's work. The

tendency to follow the lead of analogy is obvious in more than one instance. An interesting example is afforded by Alcmæon's assertion that the young of birds are nourished by the white, not the yellow part in the egg. This assertion was maintained against the contrary view current at the time, but the only reason assigned was the likeness of the white of an egg to the milk with which mammals nourish their young. It is doubtful whether Alcmæon's assertion that the brain is the centre of conscious life was due to scientific knowledge or deductions from mystical notions. On the one hand, the brain is the centre for the senses ; it is a meeting-place for the channels of the senses ; it acts in a way that causes the motions of the sense organs to come to rest. Alcmæon also made a distinction between thought and sense. On the other hand, when we are told that the soul is self-moving, that it is on that account immortal, that it is divine in the sense that the sun is divine, we seem to have traces of early mysticism, added to the results of inductive observation. Here, as in some later theories, we must recognise a dualism of science and faith giving independent results which there is as yet hardly any conscious intention to unify.

CHAPTER III

THE LATER PERIOD OF PRE-SOCRATIC THOUGHT

§ 1. THE doctrine of Heraclitus seems at first different from the theories of his Ionian compatriots. In principle, however, we find it identical, but developed to a point at which it is compelled to break through the previous limits. On the problems of psychology we find in Heraclitus new light, but such light as serves only to make darkness more visible. The suggestiveness of his work is due to the manner in which he combines several points of view; and these are sufficiently distinct to make a complicated result, but not distinct enough to make clear the elements combined in the result. The points of view in question are (1) the original cosmological method; (2) the analysis of knowledge as containing grades of quality; (3) empirical observation. Before considering the relation of these distinct points of view the facts known may be summarily stated.

We may begin with the question of sensation. Heraclitus observed that life contains two opposite states, those of sleeping and waking. As in sleep there are no sense-impressions, this contrast of sleeping and waking forms a natural starting-point for a theory; in short, sensations come into us when we are awake because the channels are then open, and in sleep the sensations cease because the paths are closed. From this it is clear that Heraclitus regards a sensation as the passage of something from the outside to the inside of us. The nature of that which is thus transmitted he does not explain; he finds no problem in sensation as such; analysis of the

conditions under which it arises seems to satisfy him. In fact, Heraclitus is primarily a metaphysician. Hence he treats sensation as one example of universal truth, as an instance of the eternal flux; it is essentially a relation between the man and the object, it involves both, and therefore belongs exclusively to neither; it is the very type of eternal transience. When Heraclitus defines sensation we get a statement that is purely an application of his universal principles. Sensation is made to depend on motion; it requires "opposition," so that like does *not* perceive like, but only out of a relation of unlike comes any perceptible effect. One is tempted to enlarge on this and quote later aphorisms, e.g. Hobbes' saying, "idem semper sentire et non sentire ad idem recidunt." But reconstruction of early Greek theories is too apt to be a process of unjustified expansion.[1]

With this view of the lower functions, Heraclitus joins a view of reason which is quite in harmony with it. Reason is found in the universe quite as much as sensible things; it is real, and therefore has an independent existence; it enters into man from without just as does the air he breathes or the sensation he obtains. Reason is common to all creatures, just as we might say that motion is common to all. By reason Heraclitus means little more than sentiency or consciousness; he does not desire to make any difference of kind between sensation and reasoning. He is, however, perfectly entitled to make distinctions of degree; he may speak of opinion and of knowledge; he may say that reason is essentially higher than opinion. And all this he does with no suspicion of hidden problems; as he would grade men, calling them better or worse without supposing that they were on that account essentially different, so he grades knowledge as higher and lower without implying more than difference of degree.

[1] See further on p. 358.

The difficulty of estimating the meaning of Heraclitus would be great in any case; it is made still greater by the exposition of his doctrine in Stoic times. Avoiding as far as possible the extensions of meaning due to Stoic writers, we may construct the theory thus. Man is an integral part of a universe which lies all round him and is in contact with him; this universe consists of something, but the nature of the universe is not merely its matter, it is rather a combination of matter with motion, and the motion is as real as the matter. We have, therefore, not only a matter, ultimately one in kind, but also an activity which is ceaseless but not infinite; it is a closed circle of repeated change with an order of its own. Though we distinguish the motion (or change) from the matter, we cannot distinguish the law of motion from the motion; the law is its life and its life is law. Man is in some way so related to this living world that his life is one with its life, and the modes of his life are varied according as that life enters into him. The soul of man is superior in degree to his body, just as fire is superior to water. The soul lurks among the grosser matter of the body and strikes through that veil as lightning does through clouds; in some states, as in drunkenness, its power is impaired by contamination. For the fiery element is that upon which the rational life depends, and the fluid retards the activity of the fiery element.

As this statement avoids the usual technical terms a brief explanation of them may be added. Heraclitus uses the term Logos to denote what a Stoic might call Reason. The term has been variously translated law, reason, or Word. Of these Word is certainly wrong; reason is misleading; and law seems most accurate. Consciousness is not regarded as more than an accident; the dualism found in Heraclitus is not a dualism of mind and matter, but of form and matter, the form being in this

case the law, i.e. the manner in which all matter fulfils its destined course of changes. In spite of his reference to thought under the specific term φρονέειν, he obviously finds in it no problem; his eye is turned towards the relation of inner and outer as we have it in the acts of inspiration and expiration; to ask how man can think under these conditions would be to him like asking how man can live by breathing. The answer would be, how can he live if he does not breathe? How can he be rational if reason does not enter into him?

Heraclitus follows the traditions of his school in choosing a first matter, Fire. His psychology is a collection of empirical generalisations based upon observations primitive in kind but obviously made by a true seeker after knowledge. His distinction of opinion from knowledge proceeds from a general preference for the efficient man; his attitude of mind is that of the typical Greek who loved excellence. The man who lives the life of opinion is analogous to the weakling whose vitality is low; he has not the same completeness as the man of strong vitality; the soul-life is one of give and take, of activity and "inspiration"; and confusion of intellect is due to obstruction in the channels through which the universal reason normally enters; this is its explanation in terms of a theory of soul which is still a confused mixture of psychology and physiology. The three lines of thought upon which Heraclitus develops his anthropology are related in the following way. The cosmological point of view furnishes the idea of a universal system which is, in respect of its substance fire and in respect of its activity or life, an embodied law. The existence of the individual is that of part within a whole; and as the elements in the whole are better and worse, so the individual is better or worse according as he has more or less of the better elements. The greater excellence belongs to the so-

called Fire, and man's superiority consists in the entrance of this fire into his composition. By it he becomes like the reason which is in the universe; knower and known are assimilated one to the other and form a unity so that the activity of the part is in harmony with that of the whole to which it belongs, and the life of man is one with the life of the universe. Thus the cosmology treats of reason as it is in the universe; the anthropology, of reason as it is in man; and the detailed observation supplies information as to the actual way in which this interrelation of universe and man is carried on by means of the organs of sense.

§ 2. The Eleatic School represented a type of thinking directly opposed to the Ionic traditions. As psychology was still in the main a branch of physics and the Eleatic teaching was decisively anti-physical, Parmenides and his disciples contributed little to its progress. None the less Parmenides opened up a rich vein of inquiry afterwards worked by Plato, and it is possible to see from the existing fragments of Parmenides that the new doctrine had a distinctive value. These supporters of anti-naturalism were accused of reducing the world to a standstill; they denied that the movable was movable, and so formed an antithesis to the naturalists who had succeeded in moving the immovable. Neither could be right and both might be wrong in the end, but at any rate both sides had an element of truth. Parmenides had laid hold of thought and meditated on its nature, as Heraclitus had directed his attention to perception. Thought has a permanence which perception seems to lack; it has a stationary character in comparison with the qualitative changes of perception; it is more akin to Being, while perceptions are akin to Becoming.

These are metaphysical rather than physical notions,

and their influence, as seen in the works of Plato, spent itself mainly upon theories of knowledge. Ideas about the constitution of man and of the soul are found in the fragments attributed to Parmenides, but their importance is somewhat discounted by the fact that they come in what is called by Parmenides the Way of Opinion. Parmenides selected those ideas from current teaching and did not regard them as demonstrable truths; they formed an appendix to his first principles, a manual of science for those who required "facts" as well as principles. This part of his work is therefore of interest only when it seems possible to detect traces of principles in the selection of details.

The nature of man is described by Parmenides as a mixture (κρᾶσις) of elementary qualities. Perception is due to likeness between the external object and the corresponding element in the individual. Mind is the product of the material composition of the body, and the activities of mind, the thoughts, vary in relation to the different constitutions of men. Sensibility is a fact, and therefore belongs to Being, or the totality of things that are; as such it cannot come and go, but must always be found where there is any reality or Being. For otherwise when it came it would come from nowhere, and when it went it would go nowhere. If we can venture to put an interpretation on the curious statement of Parmenides that even a corpse has sensations, it must be this, namely, that sensations cannot arise out of nothing, and therefore matter (even in its lowest forms) as such has sensibility; death is not the end of sensibility for matter, but only the cessation of the individual's sensations. The evidence is too slender to justify speculation, but it is allowable to suggest that Parmenides here came upon a problem of great interest. The naturalists maintained that nothing came out of nothing; there is a

physical antecedent for every physical event or effect. Parmenides maintained the same doctrine, but used it rather as a dialectical weapon. If nothing comes from nothing, that which is cannot have come from that which is not; sensibility certainly *is*, it is included in the sum of reality, and therefore it must have come from something. But can it come from something other than itself? If matter produces sensibility, has not something come out of nothing? The point was a problem to the atomists, even to Epicurus. It troubles materialism at all times; and the opposite is the assertion that sensibility is not a product of insensible matter, but that all matter is endowed with the power of sensation. This was probably the view of Parmenides, and it is interesting to see how the dialectic of his school arrived logically at a conclusion which is the forerunner of all theories in which consciousness is made to arise out of subconsciousness, or matter and mind are made coeval.

That Parmenides desired to prove that sensation is not something new arising out of nothing, but merely a change of quality, seems supported by the sayings of a later Eleatic. Melissus followed out the principles of Parmenides with relentless logic. Pain is not pleasure; disease is not health; and if nothing comes out of nothing, pain must come from pain, disease from disease, and so on. This was the kind of loyalty that destroys a theory. Parmenides had passed over qualitative change and talked only of material reality. But if motion is denied, change which is a species of motion is implicitly denied. The external world could perhaps be brought to a standstill, but if the internal world ceased from motion, life itself became nothing.

§ 3. Empedocles occupied a unique position; he combined scientific with speculative inquiry, and the fact

that he was interested in the cause and cure of diseases accounts for his attention to detail and for a psychology which is comparatively elaborate. He has, however, no idea of system, and is so far from making any consistent series of deductions from one or more first principles that he leaves his teaching a collection of disconnected statements.

In opposition to earlier physical philosophers he posits as his ultimate factors the four elements. These are unchanging forms of reality, and consequently satisfy the idea of real being which the Eleatic doctrine had made current. Individual existences are formed by the more or less temporary union of these elements. The quality of any particular compound depends on the mixture of these elements. Thus Empedocles laid the foundation for the important notion of temperaments or the idea that an individual's characteristics depend upon the mixture of the elements in the body. Though rudimentary, the idea is in Empedocles what it has remained ever since, a broad physiological determination of those aspects of a man's nature which depend upon his bodily structure. The tendency to lay emphasis on physiological data is also shown in the assertion that the blood is the seat of intelligence, while the intelligence is not made distinct from the senses. How sensations are united in the perception of an object, or how the blood functions in the production of knowledge Empedocles does not explain. We may perhaps conjecture that his experiences as a doctor inclined him to the view that the whole body is really the unit of activity and the power of thought stands in some relation to the condition of the body as a whole. This conjecture is supported by the fact that the decrease of consciousness which occurs in sleep is explained as a reduction of vitality, a symmetrical cooling of the blood.

Empedocles regards all action as requiring contact, and therefore regards sensation as an effect due to the con-

tact of that which causes it. Every object that produces a sensible effect does so by means of effluxes or emanations; these enter the pores according to their suitability; for all cannot enter the same pores, and perception is due to the action of like upon like. This famous formula appears here in its most explicit statement. It involved several difficulties; such as the fact that it confined each sense organ to a separate department and prevented the possibility of the synthesis which knowledge requires. It seems, however, to have been necessary from the Greek point of view to establish a natural relation between the sense organ and the external object; this affinity was easily interpreted as identity of matter; only in Heraclitus and Anaxagoras is this standpoint abandoned, and with it the formula, "like is known by like." [1]

The general conditions required for the production of a sensible fact are two: first, a harmonious relation between the emanations and the receptive organ; second, likeness between that which perceives and that which is perceived.

The theory of "effluxes" is obviously of paramount use in the explanation of vision. For reasons not easy to see, Empedocles practically passes over those sensations which are forms of touch, namely, touch itself and taste; he is more anxious to reduce the rest to this type than to explain the type itself, for all that we are told is merely the conditions required for sensation, not the actual causes; it is clear that *if* the effluxes do not fit the pores, and *if* the object and organ have not the community of nature which is called likeness, there will be no sensation; but, given these conditions, why should sensation arise? Why does not one stone feel another under these conditions? In brief, what is there beyond physical facts to explain the psychic result? In his failure to tell us

[1] See pp. 27, 38.

we see how limited is the outlook of Empedocles; there is still no specific problem of consciousness.

The phenomena of smell afford the most suitable matter for the application of a theory of "effluxes." Smell, says Empedocles, is due to the reception of particles from the odorous bodies, and this naturally seems to receive support from the fact that odour is often associated with bodies wasting in decay. Sound affords a difficulty where it might least be expected. The exciting cause in this case is the air, but instead of saying that we hear the moving air, Empedocles says that the current of air strikes on the cartilage within the ear, which rings like a gong; we therefore hear the sound thus produced. Before commenting on this we may first state the explanation of vision.

The eye, the organ of vision, is composed of the four elements: the interior is fire, next comes water, and outside these air and earth. As "like is known by like" we shall perceive fire by fire, water by water, and so on with the rest. The effluxes reaching the eye from without explain our ability to see objects at a distance from us, and reduce this also to a form of touch.

The application of the two general principles meets, so far, with no special difficulty, but in other respects problems arise which are almost insoluble. In the case of hearing we have a "gong" within the ear; in the case of sight we have a fire in the eye. These appear to be exceptional cases of a similar kind, for while all the elements of the eye are percipient of their "like element," the light in the eye has some further functions. The evidence being scanty and obscure, explanation is difficult. We may assume, however, that the prominence of these two additional factors is due to the observation of (*a*) ringing sound in the ear, (*b*) the flashing of the eye.

It is not possible from the existing evidence to decide

exactly how we are to explain the details of the theory of vision. Empedocles has combined a general principle with particular observations that do not harmonise with it; and any attempt to create an explanation of the detail can only be highly speculative. A similar example of want of harmony between parts of the teaching is found in the remaining points which call for notice. Empedocles believes in transmigration; at the same time, the soul is dependent upon and varies with the body which comes under the general laws of combination and separation. It is difficult to understand how, under these conditions, there can be any soul such as would persist after the dissolution of the body and make transmigration a possible idea. We find also traces of the doctrine of reminiscence; souls are ascribed to plants in a manner that recalls the pantheistic type of theory; feelings receive no distinct treatment, and are not distinguishable from opinions. Pleasure and pain are vaguely related to questions of similarity and dissimilarity in the universe: that which is akin to the constituent parts of each human being, begets in him, together with the knowledge of it, the feeling of pleasure; that which is opposed to those constituents begets the feeling of aversion. Desire is then naturally interpreted as a striving after those kindred elements which are "kindred" mainly because they satisfy previous wants. There is no separate treatment of the question of knowledge, but this appears to have been regarded by Empedocles as distinct from sense-perception. There is, however, no trace in Empedocles of the idea that man has a soul whose peculiar function it is to think. Thought is treated simply as a function of the composite organism. This view implicitly denies any inner spiritual entity. But Empedocles is not hampered by any ideal of logical consistency; what is true for him

in psychology need not be true in religion. Hence the contradiction between the analysis of man and that mystical idea of embodied spirits which Empedocles also held. Science and religion here co-exist without unity. Our knowledge of Empedocles may be so far inadequate as to make explanation impossible, but it is clear that Empedocles is on this point the forerunner of mysticism, that is to say, of all who think that a scientific analysis leaves the soul itself untouched.

§ 4. The work of Anaxagoras marks an important epoch in the development of psychology. Strongly influenced by the Eleatic doctrines, he arrives at the conclusion that there are in the universe a number of primary "things" or unchangeable forms of Being; it follows that all differences in things must be explained as differences in the elements whose mixture makes the thing. The philosopher's interest is accordingly centred on the principle of this mixture and its cause. He finds from observation that men attribute actions to reason, and this is sufficient to justify the assertion that reason is the starting-point of the activity which has put in order the chaotic mass of original matter. Reason in this way becomes an immanent force that makes for order, itself pure and unmixed, but the cause of all mixture, a power inherent in some things, and ruler or organiser of all.

The path of development from this idea to that of a universal Reason is obvious. Anaxagoras, so far as we know, made no advance that way. He looks at man only to find a principle of activity. Cognition he overlooks. Man remains a part of the Universal Being, that which is always and everywhere; but the generalisation applies only to activity and motion. Between mind or reason (νοῦς) and the soul of man, as sources of action, no distinction is made; and therefore the element which

is specifically knowable to man, his self-consciousness, is not the element which appears as important. If importance had been attached to it, the Reason which orders the universe must have been described as acting intelligently; and we should then have had a concept of the world as governed by purpose and controlled by final causes. This idea, we are told, Anaxagoras failed to reach.

Passing from the general cosmical standpoint, we find in Anaxagoras some interesting remarks on purely psychological questions; but there is no evidence of systematic treatment, and in some cases the assertions made are merely deductions from general principles. Sensation and sense-perception are broadly characterised as changes in the organism. These changes are due to a relation of unlike to unlike. It was usual at this period to suppose that contact or impression was sufficient to produce the required change; but sensation seems to be in Anaxagoras the recognition of difference, and this requires a difference between the perceiving element and that which is perceived. No perception is impossible, because every part of every organism contains all possible differences of quality, and will therefore possess the opposite of any possible object of perception. This is the application to sensation of the doctrine that "all things are in all." Anaxagoras adds that perception is always painful; this he deduces from the fact that perception becomes painful in excess, e.g. when a light is too brilliant; but he seems unaware that there is any difficulty in asserting that a sensation is painful when the pain is not perceived; he speaks of sensation as a relation between objects with little or no reference to consciousness, except as a result attained in some cases through the relation.

Particular sensations are treated consistently with these principles. In sight an image is reflected in the pupil

of the eye, but only on that part which is of the opposite colour. Smell is due to particles of a contrary nature entering in the act of respiration; hearing is due to sound which passes through the ear to the brain; "the bone which encloses (the brain) forms a cavity into which the sound rushes."

Anaxagoras shows a tendency to treat psychology from a point of view which is best described as biological. A confusion between vital function and consciousness leads him to say that plants have reason and knowledge. Many writers, supplied with far more facts, have fallen into the same error and confused intelligible with intelligent action.

The doctrine that "everything is in everything" does not apply to Nous; on the contrary, we are definitely told that there is a portion of everything in everything except Nous, "while there are some things in which there is Nous also." This is the way in which Anaxagoras "laid down the distinction between animate and inanimate things."[1] The question arises, What is the reason for the superiority of one creature over another if Nous is the same in all? The answer given by Anaxagoras appears to have been that the superiority depended on the organism; the "reason" was the organism, and was therefore aided or hindered according as the organism is more or less developed. In that case reasoning would be analogous to running, an activity which is executed well or badly according as the structure of the organism is better or worse.

This view, if this interpretation is correct, would coincide with the saying of Parmenides which makes "the thought of men depend entirely upon the constitution of their limbs,"[2] and fall in line with contemporary ideas about "mixture" and the tendency of the body to obstruct

[1] Burnet, 297. [2] Burnet, 298.

thought under conditions of fatigue or disease. Being unmixed, Nous is always the same in kind; it is not like bone, a substance whose quality depends on the preponderance of one element over others in a mixture; but yet there is a definite ratio of more and less; larger animals are more sensitive, sensation being proportionate to the size of the organ.

CHAPTER IV

THE PSYCHOLOGY OF THE ATOMISTS

§ 1. DEMOCRITUS definitely undertakes to explain all phenomena from a mechanical point of view. The universe is made out of atoms and all things that exist are compounds of atoms. In addition to the atoms we require only motion, and psychological phenomena will clearly come under the category of motion. Sensation in general is explained as the interaction of body on body. In the structure of the sensitive frame there are soul atoms inserted between the other atoms that make up the body. The action to which we have just referred is a special form of the general interaction of material bodies recognised by physics. Anything peculiar in the nature of soul-activity is due to the character of the soul-atoms, which differ in some respects from other atoms. The difference is, however, only a difference of degree; soul-atoms are more subtle and more rapid in motion; they are spherical in shape: but beyond these material differences there is no distinction of kind. We are, therefore, now in a purely mechanical world, and it only remains to indicate what psychological theory is involved in this point of view. We may first see how sensation can be explained in terms of motion.

§ 2. All sensation is an affair of touch involving immediate contact. The impression produced at any one part spreads through the body and consequently may be felt everywhere. The atom is solid but not itself per-

ceptible; the bodies which we perceive are complexes of atoms, and bodies differ because atoms differ in order, figure, and position.

These characters, which are purely geometrical or spatial, constitute the primary qualities which are perceived by touch. As before, we naturally ask for an explanation of this fundamental sense, and here, too, we find no psychological analysis. Democritus is content to reduce all sensation to forms of touch without explaining touch itself.

The objects which produce taste do so in accordance with their shapes; acid taste, for example, is produced by atoms that are "angular, winding, small, and thin." Smell may be explained in the same way, though Democritus himself neglects to give an account of it. In the case of sound we have first to overcome the difficulty which arises from the distance between the source of the sound and the hearer. Here we find a theory analogous to the "emanations" of Empedocles; the source of sound throws off particles which, mingling with like elements in the air, stream into the ear and so come to the soul. There is no reason why these particles should strike only on the ear, and they do, in fact, strike upon the whole body; but the ear alone hears, because that organ is best adapted to receive and retain the air. Of vision Democritus gives a more elaborate account. Sight is like hearing, in that the original source of the sensation may be at a distance from the person; a medium for transmission is therefore required, and something must pass from the object to the "soul" of the person. In Democritus the immediate object of seeing, as of hearing, is the air. The primary object, the thing, sends off "images" which, acting on the air, mould it into the shape of the original object; thus the eye is touched, as it were, by an air-figure which is a copy of the distant object.

To this physical theory of perception by the eye Democritus adds a theory of colour. He considers that the primary colours are four—white, black, red, and green. A colour is an effect produced by atoms and is expressible in terms of the figure of the atoms in a manner analogous to that in which varieties of taste are explained by differences in the shapes of atoms. All other colours are formed by the mixture of these four.

§ 3. Such is the explanation of different sensations and the way in which they are produced. We may now ask what theory of perception is involved in this. The immediacy of touch seems to guarantee the truth of sense-perceptions; but Democritus recognises that where a medium is used, as in sight, that which immediately touches the organ (the air) may not be free from foreign elements or influences. In the case of sight especially, the configuration of the air may be so changed as not to represent the object faithfully. The senses are, therefore, sometimes inadequate and deceptive. Again, the qualities perceived are in all cases, except touch, secondary, and due to a relation between the object producing the perception and the organ. The condition of the organ varies, and with it the result, the perception, must vary. It is clear, therefore, that while sensations are true in so far as they are what they are, the perception may easily be different from the original object (in sight) or from the normal effect (e.g. in taste). To this extent the senses deceive us. In spite of the materialism of his physics, Democritus distinguishes " true " from " obscure " knowledge. These are divisions of knowledge according as it depends on sense or reason; the superiority of reason is consistent with the doctrine that the atom is knowable, but not an object of sense. If we inquire further into the value of this reason we find it is interpreted in terms of motion: the material image

of the object causes thought by its action on the material soul. In reducing the soul to a form of body, "a body within the body," Democritus develops one of the two elements which formed the complex idea of "hylozoism," the life-endowed matter of the "physical philosophers." Life, whether of body or of mind, is primarily motion; in a sense this is a return "to the standpoint of the savage who, when he sees an animal move, is unable to explain the fact except by supposing that there is a little animal inside to move him"[1]; but while the principle of thought is the same in both cases, Democritus has nothing in common with primitive animism or the Homeric notion of the soul, and his attitude on the question of the soul's nature is obviously the result of viewing man only as an object. With this bias he naturally thinks primarily of the actions of the will, to the exclusion of knowledge, and volition seems to be a power of motion possessed by a "body" as its own nature. The body in question is called soul on account of its distinctive features, namely, the spherical shape, fineness, and mobility of its parts.

Democritus accepts the canon "like perceives like," modifying its meaning by a new interpretation. In harmony with his other views he makes likeness a relation between substances of similar degrees of subtlety; the more subtle complexes of atoms escape the senses, but the soul is affected by them: they pass through the gross matter of the body without contact, but come into contact with the soul-atoms which have less void between them. We shall do no injustice to Democritus if we compare this process to that of straining a fluid: what slips through the larger mesh is caught in the smaller. It is possible then to give a meaning to the assertion that thought is superior to sense; it is by its nature conversant with objects not known to the senses. Democritus ap-

[1] R. D. Hicks, Aristotle De Anima, p. xxvi.

pears to have distinguished various faculties of the soul and to have assigned a seat to each in a different part of the body. We hear that he located thought in the brain, anger in the heart, and desire in the liver. The maintenance of our life is connected with the act of breathing. The soul being composed of atoms, and these atoms being exceedingly fine and easily moved, there is danger that the surrounding air should force them out of the body. The act of breathing introduces into the body fresh vital matter, and also as an incoming current checks the outgoing of those atoms already mingled in the body. This part of the doctrine recalls the position of Heraclitus. It involves the idea that there is a soul outside of the body distributed throughout the universe and imparted directly to the individual. Also there is a tendency in Democritus to interpret the constitution of the universe in a manner which does not cease to be materialistic, but none the less becomes Pantheistic in the sense in which the later Stoic doctrines are Pantheism. Democritus is the first to make a direct denial of immortality; the particular combination of atoms which makes the individual is broken up and dispersed at death, and on the same physical analogy we must regard the soul as sharing the dissolution of the body.

§ 4. At the close of this period comes Diogenes of Apollonia. His work is significant for the manner in which it sums up the main trends of contemporary psychology. Diogenes takes air as the most important element in the world; in this he is returning to the Ionian[1] views, but with modifications that show the influence of Anaxagoras, Empedocles, and the medical schools. Diogenes starts from ideas purely physiological: the necessity of breath for life is the fact that causes air to be chosen

[1] *Vide supra* on Anaximenes, p. 21.

as the primary reality; the interaction between the air in the body and the air outside is the type of all vital action. The air has intelligence, and the human being is intelligent in virtue of the air that enters in from without. The air as the principle of life pervades the whole body, but there are two special centres, the head and the heart. By means of the airs round the brain we become conscious of sensible objects: the more subtle this air the clearer are the perceptions. This thoroughgoing materialism reduces thought to a function of matter. In Anaxagoras reason was a substance; in Diogenes we pass from agent to action, from reason (*νοῦς*) to reasoning (*νόησις*). This transition from substance to function was not explicitly made before Diogenes; he shows originality also in his treatment of memory and reminiscence, but the influence of the medical schools causes his psychology to be overweighted with physiological considerations. Diogenes explains thought as an activity of the dry air; moisture is detrimental to thinking; excess of moisture is the reason why the young lack intelligence. If the air does not move freely but is confined in the chest, the processes of thought become more difficult. When the air leaves the veins and settles about the heart, sleep is produced; thus all psychic phenomena are in some way related to the air and its condition. The air about the heart is of primary importance: it functions as a central seat of perception, while that which surrounds the brain is only intermediary between the senses of hearing, seeing, or smelling and this central faculty.

CHAPTER V

MEDICAL VIEWS OF THE SOUL IN THE FIFTH CENTURY B.C.

§ 1. THROUGHOUT the history of this period reference has been made to work distinctly medical in its character. The age was scientific, and the nature of man has many aspects. Nothing would be more natural than to find the art of healing dictating to psychology or the metaphysician dictating to the medical practitioner. This was, in fact, the case ; but the antithesis between science and philosophy was still undeveloped, and presents itself rather as an opposition between the different philosophies of science. Such knowledge as we have of these early medical schools throws considerable light on the mental attitude of all the early philosophers. The main source for our knowledge is the body of writings attributed to Hippocrates. Unfortunately the dates of the different treatises cannot be determined, and there is consequently considerable danger in attempting to connect any particular doctrine expressed in those treatises with the individuals already mentioned. In spite of this there is no material more important for this period than the philosophical portions of those writings, and before passing on to Plato, in whom we find the next statement of these principles, a brief review of some doctrines will be given.

Hippocrates represents the school of Cos, which in the fifth century B.C. was the flourishing rival of the school at Cnidus. The genius of Hippocrates seems to have secured the victory for Cos and the consequent decline

of its rival. Medical knowledge was still hardly free from the bondage of superstition inherited from the days when the priest was also the medical man, and that combination formed the current idea of a doctor. The treatise "On the Supernatural Disease" is a lively discussion of the relations between magic and medicine: it exhibits a sturdy opposition to all occult causes, and is a philippic against any but scientific methods of treating diseases. There is a singularly modern touch in several of these treatises, and this one in particular is a criticism that might have been written by a modern physician to destroy a belief in the royal touch or in demoniac "possessions." The original lack of distinction between religion and medicine accounts for the general character of primitive medical treatment. The "incubation" of the Æsculapian temples was faith-healing tempered by science. But by the end of the fifth century this phase of development had concluded. The Æsculapian traditions were mingled with the results of philosophical speculation. To both were added the practical knowledge and methods of the gymnastic trainer, in those days (no less than in these) an important authority on the strong man made perfect. Neither Hippocrates himself nor the persons whose works now pass as Hippocratic can be considered original. How much had been done before their day is beyond accurate calculation, but it is enough to recall to the reader's mind the physiological theories of Alcmæon, Philolaus, Empedocles, Anaximenes and Diogenes of Apollonia, Anaxagoras, or Democritus. In Hippocrates we study a culmination rather than a beginning; the tracts have to be regarded as a mirror of the age, and their contents are valued as a reflection of the most brilliant speculation of those times.

§ 2. The treatise entitled "On Regimen" is perhaps

the most characteristic document in the whole collection. It contains the theory for which empirical medicine was waiting; practice had revealed a relation between food and health: an insight into the reason was wanted. It embodies a philosophical doctrine. The "Sophists" laid stress on the dogma that the understanding of medicine depended on the understanding of man. This put the one before the many: it involved starting with an abstract idea of man and deducing from the nature of man its correct treatment. Medicine was suffering from a vicious method, and in opposition to this Hippocrates declares that the study of man must be concrete. Emphasis is now laid on climate, seasons, localities, winds—in fact, all the elements which make environment. It is the life and not the thing that should be studied: not man as a fixed quantity, but man as a sequence of states. For this view man *is* what he *breathes;* and the importance of that view was great. Plato was quick to see its meaning, and worked out its principles when he made education a nurturing of the soul in salubrious regions. Aristotle employs the idea continually; it became, in short, the accepted doctrine. Its very lack of originality made its discovery more effective: for in it people recognised what they had often thought before, what every theory of "air" had been inarticulately proclaiming.

This essay on the philosophy of health deserves at least a brief analysis to show its range and character. It begins with the declaration that the particular is only to be understood through the universal, the part through the whole. The question of diet must therefore be preceded by a disquisition on the nature and structure of man. There are certain elements in the composite body of man, and knowledge of good and bad health is simply a knowledge of the relation between these elements. Sometimes one predominates, sometimes another; activity and

nutrition produce their effects by increasing and decreasing the power of any one element; on this analysis of the problem it seems clear that the whole science of health is simply a question of properly adjusting the relation between food and exercise.

These are indeed the causes which we can directly control. But there are also conditions: in reality, when the doctor gives his prescription he takes into account the heavens and the earth, the stars, the winds, the seasons, and the localities. The extreme cases are easily recognised. Excessive fatigue or excessive eating exhibit symptoms easily understood. Medical skill lies in detecting slight changes; for these produce little immediate effect, but are cumulative: to explain the full meaning of this the author states his first principles. Life is a continual process. Animal organisms are composed of two principles divergent in nature but convergent in function. These are fire which moves, and water which nourishes. Each strives against the other, but neither attains a final victory: when fire overcomes water it destroys its own source of nourishment; when water overcomes fire it loses its possibility of movement. In other words, nature requires a balance between extremes: the body must not become full of humours, nor must it dry up and be sapless. The language here is picturesque: in the manner of Heraclitus we are told that all things perpetually change; the opposition of the principles is likened to the action of two men working a saw—both must work, but they must work in opposite ways and with equal and opposite reaction. The law of distribution, by which the nutritive substance is distributed over the body, is called a harmony. The formative element is the fire. To the action of fire is due the entire arrangement of the parts of the organism: in this the microcosm is a copy of the macrocosm. The finest kind of fire is invisible and intangible: it regulates

everything and is the source of all the activities called vital or intellectual. The vital activities belong to the soul: this is weak in youth and in age; for it is wasted away in youth by the rapid growth of the body and grows weak in the period of decline; only in the mean or middle age is it complete. The ideal physical constitution is attained when the finest (i.e. most refined) forms of water and fire are combined. This is a middle condition which realises an almost stable equilibrium. If the physical constitution is inclined to an extreme, either in respect of the water or the fire, the least addition derived from external circumstances will produce disease. Excess in the original constitution naturally makes the individual susceptible to those external conditions which emphasise his tendencies. For example, when the water-element is dense and the fire-element thin, the constitution is cold and humid; the winter season is naturally dangerous for such an one. By varying the respective quantities of the water and fire a formula can be attained for each constitution, and the medical direction is to counteract the excess and restore the ideal or balanced constitution. Similarly, men at different ages have different constitutions, for infancy is a condition in which the humid is in excess: the fire gradually attains and then gradually loses its supremacy. The same principles explain all the different degrees of intelligence, but the treatment hardly merits serious discussion: the author was clearly convinced that mental activity was directly dependent on physical states, but the dogma that a healthy body necessarily produces an intelligent soul is not successfully maintained. The contrary thesis, that physical derangements cause mental derangement, is more easily defended. An interesting point to notice is that certain dispositions are said to depend, not on the mixture of elements but on the condition of the pores (or paths) through which the soul

passes. These dispositions are the quick-tempered, the idle, the crafty, the simple, the ill-natured, and the kindly. These seem to be regarded as ways in which the inner nature goes forth: dependent therefore on the paths of exit. The voice is also an outgoing activity, and its quality depends on the nature of the channels. In both cases the quality can be changed by a treatment which changes the physical states.

§ 3. Such is the general outline of the first book of the essay on diet or mode of living. A few characteristic points from other works may be added. From the statement above it is clear that the fundamental requirements of life are spirits and humours. Considering first the physical structure, we find the basis is the four elements—air, fire, water, and earth. To each of these substances corresponds a quality called dry, hot, moist, or cold; and again in correspondence with these a Humour, namely, blood (warm), phlegm (cold), yellow bile (dry), black bile (moist). Health is defined as the right mixture of these; disease is consequently a disturbance of the relations, usually expressed as a change of ratios. The body not only requires to maintain definite relations between its own elements, but also to stand in certain relations to the universe around it. Its nurture depends on three things—food, drink, and air. To the ancient mind the "air" seems to have been a generic term for all causes of disease other than those of food and drink. The vascular system was divided between veins and arteries, and the opinion most widely accepted was that the arteries contained air while the veins contained blood. This extreme doctrine was afterwards modified, and the air and the blood were located together in the same vessels. To one who thinks of the body as irrigated throughout by air, who attributes the cause of pulsation

to the shock of air meeting blood, who moreover feels dimly that man is in direct connexion with the whole universe through the continuity of this air, the importance of this factor must have assumed the greatest proportions. Within the body the brain occupies the most important place. From it proceed all the veins of the body: they spring up from this root and grow downwards, branching out to the various parts of the body. Here is the seat of intelligence: into the brain lead the various passages of sense—eyes, nose, ears. It is from the brain that the eyes derive the humour that feeds the pupils; and all diseases begin from the brain because from it flow the humours that are found throughout the body. The close connexion of physiology and psychology in these passages is liable to produce a false impression of the writer's attitude toward the brain and its functions. If the brain receives a shock, loss of speech, sight, or hearing may follow; from wounds on the brain paralysis and death ensue. The brain, then, is the seat of intelligence, but only because it is adapted to retain the air: it is no more than a medium by which the air communicates to us its nature. Some have made the diaphragm the seat of intelligence, others the heart. Both are wrong, because, while these are quick to respond to changes, the sensations felt in them are merely reflex actions due to the contraction of air-vessels. Thus the heart palpitates in fear; there is a diffused sensation in the body produced by excessive joy or sorrow: but these are secondary; the movements thus produced are "reverberations" of the original encephalic motion. Thought can only arise in the absence of commotion; insanity arises from a humid condition of the brain which causes it to move perpetually and produces confusion of the senses. Here the author treats of the brain as the cause of all phenomena, normal or morbid; by it we think and

by it we fail to think; fears and dreams are due to its changing states. But while we see with our eyes or hear with our ears, it is doubtful whether Hippocrates would say we think with the brain. The writers incline at least to say either the brain thinks, or the air thinks and communicates the thought to the brain.

The subject of dreams is treated in a short essay which is in the main disappointing. The author clearly thinks some dreams belong to a special class that can only be understood by the interpreters who have a science of their own. He remarks that prayer is an excellent thing, but it does not remove the need for self-help; and then proceeds to enumerate types of dreams with their appropriate antidotes when they indicate morbid conditions. In the dream state, according to this writer, the soul acts freely; it is no longer disturbed by sensations, for the body sleeps. In other words, the waking state is that in which the soul is passive and the sense-organs preponderantly active; the dream state is one of activity, for the soul then produces impressions instead of receiving them. Underlying the descriptive part of this essay there seems to be the idea that the soul discovers in sleep what in the waking state goes on unnoticed. This amounts almost to the idea that a latent consciousness comes to the surface in dreams, but the author naturally does not make that notion very clear, and all that is said is of this kind: "When the stars appear (in the dream) to wander this way and that with no necessity, the dream indicates disturbance of the soul due to worry." The antidote is to turn the mind toward light subjects that produce laughter. Such advice would be good still. But the proposition "black objects seen in a dream foreshow danger and disease" proves that the author was not always equally sure in his touch. On the whole, this essay shows a very wild use of analogy and no accurate

study of the causes of dreams. It serves, however, to show that in this period there was a recognised distinction between those dreams that were supernatural signs and those which stood in a close relation to bodily conditions, and could be used as prognostics of health or disease.

CHAPTER VI

THE SOPHISTIC VIEW OF MAN

§ 1. With the Sophists a new era begins in the history of psychology. Though we may not speak of the Sophists as a school, or indeed as having a definite body of doctrine common to them, there is one aspect of Sophistic teaching which deserves to be regarded as a common characteristic. For the Sophists interpret their age in trying to restore the individual and assert his rights, and this element, common to all enlightenments, seems to furnish the peculiar flavour of their work.

The importance of this direction of thought is first clearly seen in Socrates. But Socrates is the culmination of the tendency; for what was accomplished before him the Sophists deserve credit: if Socrates set before all things the concept of the self as a fully developed union of moral and intellectual powers, it is to the Sophists we owe that emancipation of the intellect which makes possible the idea of a self-determining agent.

The Sophists are usually credited with the dissolution of old traditions and destructive criticism of religion; but this is a view which hardly does justice to each and all. In Protagoras at any rate we have a type of thinker concerned to do more than run a tilt against traditions. The fact seems to be that men had now arrived far enough on the road of development to demand some scientific explanation of knowledge. Hitherto they had asked little more than explanations of the known systematic classification of objects guided by one or other of the

available hypotheses. Mankind has only a limited power of speculating on the basis of accepted hypotheses: the multiplication of theories generates weariness of the flesh, and the spirit cries out to be released from the eternal circling of thought round the apparently unknowable. It is in their recognition of this temper that the greater Sophists agree: their claim to serious consideration lies in the fact that they took the new demands seriously. From the physical and metaphysical they retire to experience, and the motto of Protagoras is simply "back to man."

In Protagoras we have the elements of a science of man, the groundwork of Socrates and Plato, and he rightly makes an empirical type of psychology the ground of his general conclusions. His aim requires that he should first show in what sense knowledge and experience are identical in their limits. That about which we talk must be, not the hypothetically knowable, but the actually known; in other words, the actually experienced. He thus founds a psychological method of speculation.

In the process of experience the fundamental fact is the relation which the object bears to the subject. In order that I may have knowledge of an object it must affect me in some way. The interpretation of the process as given by Protagoras is based upon the idea of Heraclitus that all being is activity, and activity means in plain language perpetual transition from one state to another. The essential feature of the world of objects is therefore movement (κίνησις), and the relations between any two or more things can always be expressed in terms of motion. An experience, then, is primarily an impression; two things, previously independent of each other, come into such a relation that the movement of the one is affected by the movement of the other. It is not to be supposed that

things are movements; on the contrary, the movement belongs to the thing as its essential attribute. Since movements can vary, being quicker or slower as the case may be, we have as many qualities in things as there are actual modes of motion. A quality of an object is not a permanent possession of that object; it is merely a mode of its movement, a phase of its existence, and as the relation of the object to me is really a relation of contact between the thing and my organism, both the thing and the organism are affected in the process of perception. Thus, for example, when I see this orange there are two realities and two processes. The orange is one thing, the eye is another; the relation between them qualifies both, giving to the orange the quality of colour, and to the eye the condition which is called perception of the orange.

This simple and straightforward account of perception must have been in the main what Protagoras taught. From it we can get a correct understanding of the famous saying, "Man is the measure of all things: of that which is that it is, and of that which is not that it is not." It is unfortunate that usually only the first clause is quoted, for the second is the really significant element. As a whole it enunciates the doctrine that reality is not wider than the sum of all experiences, past, present, and to come. It was a prescription for the purgation of knowledge and the elimination of pseudo-sciences. And it was all the more valuable for the additional declaration that all knowledge is of the class sensation. We cannot say that Protagoras denied all knowledge that was not sense-knowledge; he was only interested to declare that the higher knowledge must be, like sensation, a definite activity of a human kind. It is against the world of objects which man cannot know that he protests; they must be either knowable—that is, capable of

producing a real inner activity of the human mind—or be nothing at all.

Protagoras gives us nothing that can be called a system of psychology. His universal term movement (κίνησις) covers all affections of the individual, both perceptions and emotions; and he is not interested enough in psychology as such to classify or distinguish these affections. It is, however, clear that Protagoras holds a theory which implies a definitely psychological method. He is, in his time, what Locke was in later days and Kant still later. He requires knowledge to be tested and limited by the appeal to "impressions," and he is prepared to assert that where experience ends the knowable ceases.

§ 2. From our point of view none of the Sophists is so important as Protagoras. The same spirit of criticism is shown, however, in Gorgias, and his third canon reflects another phase of psychological inquiry. Granted, says Gorgias, that we know anything, we still cannot impart that knowledge. The relation of one consciousness to another is such that it seems impossible to transfer a state or condition from one to the other. This is a genuine problem, and hardly soluble at this stage. If my state of mind when I know something is an activity of my mind, and that activity produces a physical result, sound, the hearer's state of mind is an effect of that effect; in short, a movement of his mind: and these two movements, of my mind and the hearer's mind, are co-existing facts. They cannot be one and the same, and if they are different it seems to follow that each mind must exist in isolation. As the condition of an object cannot be at the same time a condition of the perceiving or knowing subject, we can know nothing; as the condition of the speaker cannot be at the same time the condition of the hearer, we can impart nothing. For the solution, theoretically, of this problem, Gorgias re-

quired a mass of material not at that time available; consequently he succeeded only in stating a problem, but the mere statement was itself a considerable advance upon all theories that rested upon such doctrines as "like knows like." Psychology progresses in Gorgias towards a recognition of the significance of consciousness, and the gulf which lies between the material object and the thinking subject.

§ 3. In a history of philosophy Socrates and the Sophists can hardly be placed in one class. In a history of psychology Socrates can only be regarded as an appendage to the line of Sophists, as one who worked in their spirit with new aims and with purposes that tended to check the development of psychology. It is in his grasp of the concept of the individual that Socrates breathes the spirit of the Sophists; not merely in reference to morals, but in every respect. It is inaccurate to distinguish Socrates as one absorbed in ethical questions only: it is equally inaccurate to assert that he believed in the reality of knowledge, while the Sophists did not. The first statement is inaccurate because Socrates makes no abstraction of action from knowledge; he looks upon man as a whole, and merely emphasises the function of knowledge in the scheme of life. The second is inaccurate because the Sophists cannot be taken as a school whose teaching implied that there could be no real knowledge. We may rather say that Socrates was like the Sophists in directing all attention upon the individual, but Socrates is peculiar in regarding the individual from a less scientific or theoretic standpoint than did the Sophists; for Socrates the individual means the person. The Sophists of whom we have spoken were content to show the relation of the individual to his world. Socrates desires to teach the individual his relation to himself. Self-development, self-

consistency, and self-knowledge are the key words of his teaching. From this standpoint he takes up the question of method and diverges from psychology. Influenced by the Sophists, he adopts a psychological standpoint without elaborating any psychological theory; in place of the analysis of psychic life we have a dialectic of concepts.

Incidentally Socrates contributes to what may be called the psychology of Ethics. Man has by nature a tendency to strive after happiness, and this natural conation is the root of all desire. Satisfaction of desire is only found in the good, so that all desire is really the will to be happy, which is the same ultimately as the will to be good. But while this appears to be a psychological analysis, it is in reality a metaphysical doctrine made explicit only in part. For we require to know why the object of desire is the same as the good, and the answer cannot be given from any merely psychological standpoint. As Socrates failed to distinguish the desirable, i.e. the good in psychological terms, from the true end of man, i.e. the good in metaphysical terms, so he fails to make clear the reason why the will always acts in accordance with clear knowledge. Both these defects are due to one source, namely, a defective analysis of emotion. In trying to present man as a unity, Socrates gives inadequate attention to the obvious effects in the way of conduct which show the dualism of human nature. Being chiefly interested in the concept of man he distinctly works upon the basis of an ideal concept of man, and the theory finds its true conclusion in the concept of an ideal wise man, such as the Stoics elaborated.

It follows from this that will is either nothing at all or simply the reason when it is in action, practical reason. The analysis of human nature gives us only reason and the passions, and the passions cannot overcome reason. This conclusion is due to the idea that man has faculties

which are essentially distinct and therefore do not affect each other. Man cannot have passions in the rational part, nor reason in the emotional part; the parts co-exist, but beyond that are not related; the psychology of motive resolves itself into the question which among the elements is the stronger when there is conflict between the opposing elements. The doctrine is therefore rightly called "rational determinism," since it gives the first place to reason as a faculty and recognises no quality in actions except such as are due to excellence or defect of knowledge.

In one respect this analysis must have seemed defective to Socrates himself. His method was primarily introspective, and his ideas of the source of action were derived from reflection. In his declaration that he was guided by a dæmon (*δαιμόνιον*) we have the recognition of an element in the self not capable of analysis. The psychology of Socrates was too simple to explain all the facts, and of this he was conscious in his own experiences. The reason for action in many cases was too obscure to be definitely assigned to a rational insight or a clear desire. Action of the highest kind is often in its origin due to instincts, and these are reactions of the self as a whole, showing us that the self as a whole is something more than the parts which we have in an analysis, something therefore that appears to be relatively transcendental. Whatever Socrates really meant by this term "dæmon," he certainly regarded it in this way as a factor in conduct which by its very nature defied further explanation; and there is no doubt, from the way in which he trusts it, that he considers it in some sense divine, belonging therefore to that undercurrent of individual life which is the universal and divine element in all beings.

§ 4. The development of psychology which Socrates

arrests is distinctly assisted by Aristippus, who is superior to Socrates in logical precision just as he is inferior in breadth of vision and grasp of human nature. Starting from the position of Protagoras that knowledge is primarily perception and perception is inner movement, Aristippus develops the sensationalism which is obviously latent in the doctrine.

In the sphere of cognition he recognises only the subjective state, the inner movement of which we are conscious, and from that deduces the proposition that all knowledge is subjective, the thing remaining unknown and only the effects of its action being perceived. This seems clear from the fact that things appear differently to different people or to the same people at different times. Thus the doctrine of Protagoras was perverted into complete phenomenalism, and likewise the third tenet of Gorgias was joined with it in the assertion that one man cannot know the feelings of another, so that words as used in common language cannot be known to be means of communicating knowledge. In the sphere of action this uncertainty makes it rational for every man to aim at the production of the one thing which he can certainly know to exist, that is, his own state of feeling.

Aristippus must be allowed the credit of grasping one psychological truth which is too often obscured; he saw clearly that feelings as feelings have in themselves no distinctions of better and worse. This he formulates in language natural to a time when psychology and anthropology, psychics and physics, are hardly distinguished. Feelings or perceptions are for him movements either smooth or rough (λεία, τραχεῖα, κίνησις), and from the point of view of feeling pleasant or painful. Pleasure or pain must accordingly be an experience and a quality of existing time, or the present; the past and future should not be considered. The object of

pleasure is not identical with its quality; all pleasure as such is good, even if derived from unworthy objects or disreputable actions, and all pain is bad. The only differences recognised are those of quantity, of greater and less intensity.

In its historical context, this clear exposition of psychological truths deserves credit. One further point was added which showed its limitations. For objects physically identical produce different effects. "The sight, for instance, of the sufferings of others, if they are real, gives a painful impression; if only seen on the stage, a pleasurable one";[1] and from this it follows that experience cannot be analysed as merely a physical impression on a physical object. It is this which compels the Cyrenaic to allow the existence of something more than sense-impressions, which in fact sooner or later compels the recognition of a self reacting to impressions and interpreting them through a system of ideas; but for this, with all its implications, man was not ready, and the only result of the admission for the Cyrenaics is a slow but sure change in their teachings. The later Cyrenaics followed the ethical trend of thought and proclaimed the superiority of rational pleasures and the need of a well-balanced judgment of pleasures. For this they had no psychological basis, and expounded their doctrine rightly but not consistently. If we may venture to generalise from the character of Aristippus and the tone of his whole teaching, it would perhaps be right to say that it lapsed into a feeble doctrine of faculties. For the superiority to feeling and necessity of being master of the passions which is claimed by Cyrenaics as much as Cynics, implies that the rational part can stand aloof from the desires and choose deliberately which it will admit and which should be rejected.

[1] Zeller, Socrates E.T., p. 359.

CHAPTER VII

THE PLATONIC VIEW OF MAN (I)

§ 1. PLATO has given in his writings a full account of what he considers the ideal of knowledge. The ideal condition of man is one which unites complete scientific knowledge with complete insight. The work of science is to reconstruct the universe so that the eye of the mind may survey it as a whole and feel the beauty of its perfection. This was no vain imagining for Plato; it was a passion and a vision. It led him to wide study, anxious thought, and elaborate composition: only a consummate master of expression could so easily conceal the raw material of his discourses. In Plato we find the first conscious attempt to systematise the results of Greek speculation; no branch of learning was left out; every science contributed its doctrine or furnished an example of error; the universe was studied from every point of view as one might travel a wide country and talk to many men before constructing a final description of its character. The comprehensiveness of this survey is not yet fully grasped: new discoveries continually show that every page of Plato has its pointed references, and nowhere more than in the departmental sciences among which his psychology, in part at least, must be counted.

Plato had a keen appreciation of history; he would have agreed that history is the accumulated experience of man; he had no delusions on the question of originality, but believed in learning from others all they had to teach.

To science and the history of science he joined speculation, which is for him no more than an insight into the meaning of things, attained mainly by the study of things. In psychology we have these two terms as a broad basis of classification; part of it is scientific and part is speculative. The foundation is the theory of man, his nature, structure, and functions: and here we recognise at every step the influence of scientific treatises, especially those that were current in the medical schools. Next comes the theory of the soul, which is an intermediate nature, so that it is in part the object of scientific knowledge, in part the object of metaphysical thought or religious feeling. Man is in some respects only a machine, and so far as that is the case, can be treated under mechanical categories: he is also allied to the non-mechanical, the purposive, and the rational, and demands consideration on teleological and transcendental principles. He is also in many respects just that unique intermediary composition called man, to be considered as the anthropologist considers him. Thus we find a complete survey of the soul, varying in its point of view, varying in the sources used and the method employed, varying finally in the value of its results. For science Plato certainly had small regard when it claimed to give final judgments, but the common notion that Plato was "unscientific" must be pronounced an error. If he disliked atomism he certainly studied it; the abstract sciences he knew and praised; Hippocrates he mentions as one who reached true results by true methods; the current manuals of physiology and medicine he must have known verythoroughly. The sources of his ideas cannot always be traced, but it will be obvious as our account proceeds that Plato is continually using the works of his predecessors: the "Timæus," in its aim and method entirely deserving the name of a myth, is packed with the dry statements of such traditional and

contemporary doctrines as constituted the science of that age.

§ 2. In the "Timæus" we find an elaborate description of the creation and structure of the body. The first and most important part is the marrow, of which one portion is the brain, made to be enclosed in the skull; the other is the spinal cord in its bony sheath. The brain, as the most perfect part and designed to receive the divine seed, is made in the perfect figure and is round; similarly, the head is described as a globe. The spinal cord is both round and elongated. These two are the conductors of vital force, for on them the soul acts: the rational part of the soul acts on the brain, the other on the marrow. The vertebral column and the general structure, sinews, and flesh are next considered. Flesh is regarded by Plato as obstructing sensation: consequently all the more sensitive parts were made with a comparatively slight covering of flesh, excepting the tongue. The flesh is only a medium for the transmission of the external impression to the conscious centre, and the less there is to traverse the better; the tongue is an exception because its flesh is especially endowed with powers of discrimination. After describing the creation of hair and nails, Plato tells us the Creators "divided the veins about the head and interlaced them about each other in order that they might form an additional link between the head and the body, and that the sensations from both sides might be diffused throughout the body." The whole structure is an organism continually at work assimilating new matter and giving off waste material; these activities may be called processes of repletion and depletion, corresponding by general analogy to the activities of inspiration and expiration.

Such is the general structure of the body: we may

now pass to the functions which it performs. These are of particular interest, because it is here that we meet the fundamental concept motion. It will be shown later that the act of perception, as a relation to the external world, is interpreted through the idea of motion which as a property common to the object in the act of impressing, and to the subject as recipient of impressions, forms the constructive link between man and his sensible world. Before discussing that point we must deal with the physiological activities, the motions of the body and of the nutritive soul.

We have stated briefly the material structure of man. If we turn now to the composite organism, the united soul and body, we find its specific difference consists in vitality, in the possession of a vital principle or soul. The fundamental activity which all other activities presuppose is that of nutrition; we have therefore, as logically first, the principle of desire, which leads to nutrition. The soul of man is from the first dual; the rational soul is created by God and placed in the head; the demiourgoi create the irrational soul which is placed in the body. This irrational soul comprises a better and a worse part: the better part is that which inhabits the heart and functions in such manifestations of life as energy, courage, and ambition; the worse part is placed below the diaphragm and functions in desire and appetite and nutrition.

This description is in Plato thoroughly subordinate to irrelevant purposes. If it were merely psychological the estimate of values could hardly be thus set forth; there are no possible reasons within the limits of science for thus degrading the nutritive functions; only from an ethical or metaphysical standpoint is this subordination of one soul to another justified. Plato's psychology in the "Republic" is a kind of phrenology on a large scale; in the "Timæus" it is the leaven of fact in the myth; in neither is

it free from influences that prevent a purely scientific treatment. The inductive and deductive methods are employed with little or no distinction, and conclusions are reached from empirical or rational premisses with equal facility. Reason is assigned to the brain probably on purely deductive grounds, that being the part nearest the heavens and man being, as it were, an inverted plant, " for the divine power suspended the head and root of us from that place where the generation of the soul first began " ; the heart was probably chosen as the seat of courage from observation of the feelings attending fear, anger, and the like ; while the desires and passions could be relegated to the lowest parts not only to banish them as far as possible from the head, but also as a result of observing the processes of nature and the automatic production of such states of desire as hunger or thirst.

These " souls " may be distinguished according to the quality of their movements. From the ethical point of view we speak of self-control : Plato describes this as self-originated and regular motion. The perfect and self-sufficient motion, the circular, is confined to the head. The lowest part does not share in self-originated motion at all ; it preserves only a chaotic state of disturbance analogous to the general chaos of irrational motion in the first stage of existence ; it is akin to the life-principle of trees and plants, the purely passive existences. But though by nature and production the spirit of life which inhabits these lower regions of the organism is thus a " plant-soul," Plato seems to recognise that its co-existence with other soul-faculties involves some degree of co-operation unless man is to fall asunder into two distinct parts. Means are therefore devised for keeping the extremities in communication. As the desires arising in the lowest soul are known to and can disturb the highest soul, so the movements of the highest soul can produce

effects in the lowest. This is the explanation of that most surprising part of Plato's psychology, the teleological theory of the liver. The liver, we are told, acts as a mirror for thought; hard by it is the spleen, which acts as a sponge to keep it clean. The first obvious intention is to explain the control which reason must be capable of exerting on this lower part; being itself wholly irrational the lower soul must receive direction in the way of perception—perception itself being ultimately motion. When we are told that the liver reflects thought as a mirror reflects an image, we are really being told that the liver has a power of reaction which is controlled by the law "like perceives like." The power of thought is like the acid element in the liver: it is therefore capable of commanding sympathetic activity in the liver; and this explains why some people not only *know* a thing to be bad, but also have a positive disgust for it, a *feeling* of its badness.

Here Plato is constructing his theory in reference to the composite nature of man, and his ideas are mainly those of the medical writers. The body is directly affected by the soul on account of the "sympathy" between them, so that the bodily states are reflections of the states which would now be called mental.

Closely connected with this subject are the views of Plato on sleep and dreams. The characteristic of sleep is the cutting off of the soul from the external influences. As the eye is cut off in sleep from the light, so the soul is shut up in itself and its motions subside in the hours of darkness. But a certain amount of agitation sometimes remains: "If the quiet is profound, sleep with few dreams falls on us; but if some of the stronger motions are left, according to their nature and the places where they remain, they engender visions corresponding in number and kind." On the meaning of dreams Plato speaks a little uncer-

tainly. He regards them sometimes as an activity of the desiring part of the soul, and in the "Republic" a remarkable passage on the moral character of dreams shows that he considered them the expression of desires which are usually suppressed. The duty of the good man is to prevent the rebellious activity of the desires; he neither starves nor surfeits this part of himself, and so his sleep is not troubled by its sorrows or joys. Similarly, he will put to rest the spirited element and so free the reason from all disturbances. So far Plato gives a very "scientific" account of dreams; he is following the example of the doctors who had already begun to restrict the belief in divination. In the "Timæus" Plato speaks as though all these states, dreams, inspiration and possession alike, were merely abnormal conditions, or at best a dim expression of desires that might indicate some reaching out after the final objects of desire and so be, as it were, intimations of things eternal. In the "Republic," on the contrary, he seems to favour the idea that in sleep the rational soul, if it is not troubled by the irrational parts, can attain truths not otherwise revealed. We must conclude, therefore, that Plato on this point was equally affected by the traditions of the supernaturalists and the criticisms of the naturalistic schools. In this we see the beginning of such a theory as that which Philo was content to put forth, a compromise between religion and science which was not altogether an irrational course for those who held that soul and body were distinct in essence. For on such a basis it is natural to see in a physical explanation of dreams a theory that might well be true of all cases in which the soul was hindered by the body, and yet be quite irrelevant in regard to the separate activities of the Reason. This is hardly the place to discuss Plato's reasons for making the liver the organ of divination. The passage ("Tim.," 71) is a mixture of satire and sense: the sense is in the explana-

tion of forebodings as dependent on organic states ; this is the divination in life given " to the foolishness of man " : " after death the liver becomes blind," says Plato, thereby denying the utility of that divination which was actually practised with the liver of victims, and which probably suggested the whole line of thought elaborated in these sections of the " Timæus."

§ 3. We have observed already that the superiority and inferiority of parts of the soul can be expressed in terms of motion, the circular self-originated motion being characteristic of the noblest, the impressed lineal motion of the lowest. The history of the soul is the history of a gradual establishment of self-dependence and equilibrium out of a state of chaos never quite superseded. In the beginning there is a chaos of movement, all possible forms of external movement taking effect on the body which aimlessly yields to every force. This state can never be quite superseded in the life of a human being, because he is always in intimate connexion with the outer world ; he continually takes in and sends out air ; he absorbs matter as nutriment and again gives it back ; last, but not least, he remains subject to the impressions called sensations.

In this sketch of the beginning of soul-life, Plato attains a breadth of treatment nowhere surpassed. For his basis he has the fact more explicitly stated by Aristotle that the young live by sensation and emotion ; time brings with it a less impressionable condition and more control by the central organ, to say nothing of habit which, as it implies less plasticity, eliminates the possibility of some movements. On this basis he builds the magnificent structure of imagination and sees with poetic intuition the relation of part to whole. Bound down in its prison the body, the soul is literally in touch with the whole universe, and no movement thrills through

that universe without its sympathetic tremor in the mortal body; reason asserting itself as a power brings order into the smaller cosmos of the human soul, and so attunes it to the harmony of the world's Soul and of God. Thus the structure of theory can be built up from below, on the foundations of motion, and so reach to the heaven of reason. This we must leave for a while in order to consider the lower functions of the psychic organism.

§ 4. In the treatment of sensation Plato relies on his conception of the human body as capable of receiving impression from without and responding with an inner motion. Sensation is not coeval with life; for at first the soul is without sensation on account of the chaotic condition of the whole organism. Sensation emerges as soon as some degree of order is established; then the organs of sense begin to act according to their distinctive nature and separate sensations arise. Thus Plato explains discrimination as primarily a result of physical or psychophysical distinctions: in other words, he bases discrimination of perceptions on difference of motions, the inner on the outer, the particular on the general, the individual on the cosmic.

All sensation is a mode of perceiving external force; perception is fundamentally reaction; some parts of the body are subject to shock, but do not themselves respond with any inner movement, such as the hair and nails: these are moved but not movent, receive but do not transmit motion; they are non-conducting. The sentient parts have the peculiarity of being easily moved and of transmitting the motion, which thus spreads over the whole organism and so reaches the soul. This is the general principle of which we have special examples in the special organs.

The eye was created full of a gentle fire which does

not burn, but is what we call light. This light is homogeneous with that in the outer world. Sight occurs when the light within joins with the light outside the eye; for then a continuous substance is formed and motion can be transmitted along the ray which is qualitatively identical everywhere and literally continuous. At night the connexion is broken: cut off from the outer motion the inner fire ceases to move: rest is then induced and sleep; though sometimes the motion persists and then dreams occur.

The "affections peculiar to the tongue" are caused by particles which either contract or relax the vessels (φλέβες) of that organ. The objects of taste are either (*a*) bitter, or (*b*) salt, or (*c*) acid, or (*d*) sweet. According to their composition these different kinds of bodies produce the corresponding tastes.

Smells do not admit distinctions of kind. The sensations of this class are produced through the veins about the nose which are too fine to admit particles of earth and water and too wide to be excited by those of fire and air. Smell, therefore, is produced by vapours or "half-formed substances," that is, substances in an intermediate condition such as mist or smoke, derived respectively from water and solid bodies. The region affected by smells lies between the head and the navel, and the effect is produced by the nature of the physical contact; rough particles are irritating or painful and smaller particles soothing or pleasant.

Hearing is described, on the same general principles, as the result of impression or shock. For speech is a kind of blow transmitted through the ears, by means of the air in the cavities of the body, to the blood and the brain and so reaching the soul. For character of the sound as to pleasantness or unpleasantness depends on the character of the motion, which may be swift and violent, or even and smooth.

All sensations in Plato are produced by specific action on the special sense organ, and consist of a motion, more or less diffused through the organism, which has variations of quality. Such sensations as those of the eye are neither pleasurable nor painful, and in that case the motion is unrestrained and unimpeded: pleasure arises when the motion is produced by particles that suit the organs they enter, and pain is the effect of unsuitable particles. We may also say that the character of the motion, its violence or smoothness, affects the character of the sensation; but the statements of Plato on this point are not very clear, and the subject can be left until we discuss his theory of pain and pleasure.

§ 5. From one point of view man is an organism in contact with the world around him, and he must therefore be studied as an object among objects; from another, he is the centre of a world which may or may not have its objective counterpart, a world of ideas which must in some degree be subjective. In discussing perceptions we take up the cognitive aspect of man's life and all that we should now call subjective, in a sense hardly appreciated by Plato. The difference between the ancient and modern use of the term "subjective" is not expressible in a phrase, it must be understood through a study of the whole of the Greek theories of man's rational life.

Hitherto we have dealt only with what are called "affections" (*παθήματα*). In the "Theætetus" Plato clearly shows that the life of the soul is more than the passive existence implied by the term "affections": this we are forced to acknowledge if we consider sensations themselves, for we cannot abstract sensations from memory or knowledge without practically denying sensations themselves. If any creature is merely sensitive it is not a man but an animal; for example, an oyster or a tad-

pole. There is also a fallacy in the popular habit of speaking as though the organs of sensation were independent of one another and of the whole; on the contrary, man is not a mechanical structure like a Trojan horse, made up of disconnected parts, but rather an organic and functional unity. The correct way to describe sensations is to say that we perceive this or that *through* the appropriate organ. Plato is not at this stage prepared to commit himself to the statement that the *soul* is that which actually perceives; it is sufficient for the present purpose to establish the idea of a central unity which functions through the organs of sense. This introduces us to the inner mechanism of the rational being: we now cross the threshold and study the operations of the mind when it thinks.

Knowledge, we are told, consists not in "affections," but in the activity of the mind which thinks them. This activity is not in all cases pure; there is a region of intermediate activities about which Plato says little, but which are nevertheless recognised by him as important. The functions in question are those of memory, mental association, imagination, and emotion.

Memory is defined as the preservation of a sensation. A slight ambiguity attached to the Greek word for oblivion (λήθη) leads Plato to make an interesting distinction. The opposite of remembering is forgetting, and that which is forgotten is, for the soul, non-existent. The power of memory seems to require some persistent condition of the ideas that can be recalled: it is necessary therefore to distinguish between those affections of the body which can and those which cannot be recalled. Some affections of the organism are "quenched" and never reach the soul: of these there is no memory; they form a part of the universe of motion but not a part of our conscious life. It seems scarcely correct to call these

states subconscious; for Plato, that which is not in consciousness is outside of it, and his psychology does not include any states of mind that are beneath the threshold of consciousness. The wide extent of the term soul makes it possible to regard some processes of the soul as external to the conscious self; motions arise within the psychic organism which have no effects upon the mental life. It is necessary, then, to distinguish three things: first, the impression from without which never arrives in consciousness or, in Platonic language, reaches the soul; secondly, the conscious state or idea which has lapsed into oblivion; thirdly, the potentialities which are developed in learning and make possible that remembering which is not conditioned by our previous life on earth. Here we have again the Platonic division which recognises three types of existence: that of the body, that of soul and body, and that of the soul alone.

In its primary form memory is for Plato practically consciousness: if the sensation once establishes itself in the conscious life it persists either as a potential thought or as an actual idea. Oblivion in this second sense of temporary forgetfulness is the nearest approach which Plato makes to the notion of subconscious states. The transition from potential to actual is effected by the active effort of recollection. While memory is no more than the retention of sensuous impressions, recollection is a distinct act involving principles of connexion between ideas.

In the "Lysis" Plato speaks of liking a person or thing for the sake of some other person or thing; he recognises there the transference of affection, and speaks of "association" in the popular sense in which anyone may say nowadays that he values a thing "for its associations." In the "Phædo" the principle of association is definitely stated as the explanation of the way in which, for ex-

ample, the lyre might remind me of its player or a picture remind me either of the person represented or his friend. Plato also says that the association can be based on likeness or unlikeness: it is clear, therefore, that he had observed and roughly analysed this class of mental phenomena. The activity of mind in thus supplying the counterpart of any given experience is called Anamnēsis, recollection; of its transcendental significance we must speak later.

Imagination is a mental activity in a sensuous form; sensation, memory, and opinion are all accompanied by an imagination. The word Phantasy (*φαντασία*) in Plato suggests the unreal as opposed to the real; the art of phantastic (*ἡ φανταστική*) is the art of producing appearances; so, being concerned more with the cognitive value of mental processes than their intrinsic characteristics, Plato pays little attention to this power of producing unreal appearances. There is a science of imitations called "representation" (*ἡ εἰκαστική*) which aims at truth more than the art of fantastic: to this the preference is given, and among the cognitive faculties we shall find conjectural representation (*εἰκασία*) included. The emotions we leave for consideration later; with the passing remark that Plato at one time regards them as belonging to the body and at another as pertaining to the soul. With this ends the study of the soul from the point of view of man's daily life.

CHAPTER VIII

THE PLATONIC VIEW OF MAN (II)

§ 1. PLATO does not review, as does Aristotle, the psychological work of earlier thinkers. It is, however, obvious from such references as he gives and from the nature of his work as a whole, that he is strongly influenced by previous theories. The account we have given of his psychology so far recalls many points of earlier doctrine; but from Thales to Democritus we look in vain for any adequate treatment of cognition, of the psychical as distinct from the physical. Plato is alive to the importance of purely psychic phenomena, and proposes to describe and account for them. In so far as he describes them we have an analytic theory of the soul; when he attempts further to account for them, difficulties arise; the border between analysis and hypothesis is crossed; and his theory of the soul, becoming transcendental, absorbs the speculations of Orphism and Pythagorism. The term "psychology" in its strict sense does not include these speculations, but it is not possible to explain Plato's views without these metaphysical and theological notions.

The Orphic idea of a soul which has reality apart from the body was primarily formulated in relation to the idea of successive existences. Its value is entirely relative to the purpose which it serves, the possibility of salvation by works in successive incarnations. All theories that reduce soul to one or more modes of motion run counter to this; and the idea, which appeals strongly to Plato,

will have to be sacrificed if no reason can be given beyond what Orphic or Pythagorean enthusiasts can adduce. But support is at once found for the notion in the very fact that physical theories leave unexplained the phenomena of the rational life. The explanation of true knowledge thus requires and supports a new doctrine of soul; the fact of knowledge is the verification of what we can deduce from this concept of soul, and the explanation of knowledge leads upward from sense to an eternal reason.

Hitherto the psychology of cognition has been concerned only with things. Reflection shows us that we have also knowledge of relations and ideals of goodness and beauty; in the abstract sciences we deal with notions which may be referred to sensible objects but cannot have been derived from them. Even so common a notion as that of the straight line is a notion to which nothing in the sensible world corresponds. We are thus brought face to face with facts that compel us to look for some source of knowledge other than the senses. A clue to the right solution is given by memory. An experience frequently recalls a former experience, and we are perfectly aware that we revive the former experience by an act of mind. But in some cases that which is remembered has never been experienced in this life; the remembrance must therefore be the revival by the soul of experiences that belong to the soul itself. That which we thus recollect is truth independent of the present time, in its nature eternal; and therefore our own thought, properly understood, proves that the soul has an existence of its own, an activity independent of all sensation, and a life which is at least not limited to the span of a bodily existence.

This theory, commonly called the theory of Reminiscence (ἀνάμνησις), is Plato's proof of thought as an independent reality. Motion, the predominating

factor in earlier thought, has received due recognition; beside it Plato puts Consciousness as something irreducible. But this argument does not prove more than two facts, the reality of the soul as that which thinks and the reality of its activity as unique. As the soul has commerce with the eternal and immutable, the Ideas which are represented in its concepts, there is a presumption that it is itself no less eternal. The soul might, however, have a life longer than the life of the body, yet ultimately perish. We need, therefore, some further proof of immortality which Plato supplies from metaphysical reasoning. We can only say of this that Plato succeeds in supporting his belief with arguments from the essential simplicity and unity of the soul; the point remains to the last a matter of belief.

Having thus established the reality of the soul, Plato is able to develop a theory of cognition. The soul is capable of three states—knowledge, opinion, and ignorance. These are names of the way in which the soul can be related to objects; with respect to the real, it has knowledge; with respect to the contingent, opinion; and with respect to the non-existent, ignorance. This classification is obviously derived from logic; from the point of view of psychology we must describe knowledge as the pure activity of mind, opinion as a mixed activity, and ignorance as either the privation of action, a condition of darkness when the soul is not kindled, or perverse activity. When Plato formulates these distinctions in terms of psychology we find four faculties mentioned—thinking, understanding, belief, and conjecture. These distinctions, then, form a scale from the best to the worst, from the pure activities of soul to those most impeded by sense. But the idea is always the same: soul is imprisoned in body: the body hinders the soul and hence the differences in our forms of knowledge. Psychologically the dualism

to which Plato commits himself has no solution: the world of reason never even comes into contact with the world of sense; percept and concept remain unconnected. This is the natural result of beginning from the basis of motion to explain sensation and from thought to explain reason. Whether Plato succeeded in restoring unity to the world of man is a question that does not come into psychology.

These faculties are not to be confused with the parts of the soul mentioned above. When Plato divides the soul into its parts he is dividing one from another the distinct aspects of life and assigning to each a definite principle in a definite place. The faculties are not thus distinct; they are not manifestations of different principles, but activities of reason dependent upon objects which call the activity into being. The primary difference is that between the pure activity of intellect (*νόησις*) and the activities conditioned by the body (*δόξα*). The pure activity may be either knowledge (*ἐπιστήμη*) or understanding (*διάνοια*), according as the object is an idea (a pure unity), or a scientific concept (a unity given in a multiplicity). The activity which is conditioned by the body (*δόξα*) comprises belief (*πίστις*), a practical but unscientific knowledge of the use of things, and conjecture (*εἰκασία*), which apprehends objects as they are presented, but takes no thought of their significance. The criterion of excellence in the case of the thinking soul is the degree to which it is capable of thinking over the given data. Plato's distinctions are based on this idea: the lowest form of thinking is the bare recognition of the object; the highest is the comprehensive intuition of the man who sees all things as part of a system (*ὁ συνοπτικός*), realises that each part has its being in the whole, and brings that system to bear upon each thing.

§ 2. It is not difficult to describe knowledge in general terms, but a scientific definition can only be obtained by a long process of discrimination and logical analysis. In the "Theætetus" Plato undertook that task, and from that dialogue chiefly we gather his views on the different operations of the mind when it thinks. There is no doubt that the foundation of our thought is laid in sense-perception, and Plato finds it convenient to arrange his argument in the form of a refutation of the doctrine "sensation is knowledge." The indefinite character of the term "sensation" (αἴσθησις) must be remembered; the crucial point of the discussion lies in the fact that a man who knows something *feels* sure of it; knowledge is therefore psychologically a kind of feeling and it is true that knowledge is felt certainty. The ordinary man can thus reasonably maintain that knowledge is feeling, and that when he knows he also feels that he knows: does it follow that feeling is knowledge? The attack on the problem must begin by explaining more accurately what is involved in sensation. Life is activity, and the life of the soul is sustained and preserved by activity. We do not look, therefore, for permanent and changeless conditions of the soul, but for processes caused by action and reaction. A simple example of sense-perception, such as perception of colour, can be analysed and shown to involve two factors—agent and patient; while the colour is itself neither of these, but the product of both. The real in these cases is in one sense no more than appearance. For the product varies with variation in the two factors concerned. Relativity enters into our perceptions in a double sense: the object which appears large at one time will appear small at another if put beside a greater; that which tastes sweet to a man in health may seem bitter to the same man under other conditions of the body.

From this it becomes clear that there are two distinct mental conditions: one is the immediate recognition of an impression, while the other is the reference of that impression to a system of ideas which is recognised as existing before and after the present moment of feeling. While feeling is the psychological core of the mental state that forms judgments, it is not the whole mental state; knowledge is more than feeling. The first point at which Plato finds sensationalism weak is that of time; if past and future are to be taken into account the present must be transcended: but sensation does not carry us beyond its own limits of time. It is possible to prove that sensation is only a part of the mental state; we have a sensation when we see the letters of a language though we say we do not know the language; we have knowledge of an object when we remember it, though we say that we have at the time no perception of it by the senses. These cases establish a difference between sensation and other functions of the mind; they also prove that knowledge is more complex than direct sense-perception.

The idioms of everyday speech preserve the fallacies of uncritical thought. The Greek could parallel an Englishman's way of saying "I see your point," or "I feel the truth of your remark." The pioneer of psychology and logic has to treat these phrases as crystallised theories and show their truth or falsity. Plato succeeds in showing that there is a kind of sight that is not of the eye and a kind of feeling that is not a sensation of the same kind as sensations of heat or colour. It might, however, still be true that knowledge was a feeling; if not of these kinds yet of another kind; and none the less feeling. This raises the crucial question, Is a man always right when he feels that he is right? If so, it will be necessary to admit that the feeling is its own guarantee, which was the essence of the original individualistic maxim of Protagoras. This

point can only be decided by an inquiry into the nature of error. At this point Plato's inquiry divides into the two allied subjects of psychology and of logic : the logical aspect must be omitted here and the psychological presented alone.

The argument has made it apparent that sensation implies an immediate relation to an external object ; while the mind is capable of activities concerned with objects that are not sensibly present. This point is first made in connexion with memory ; when the mind remembers it recalls an object by means of an idea. The soul is likened to a block of wax on which objects impress their resemblances ; retention of these impressions is memory, and memory makes possible the recall of past impressions and the co-existence of new and old impressions. When the mind is stored with these ideas derived from sensation, it conducts, as it were, an inner conversation, a dialogue with itself. This inner speech is the judgment which flows forth in the outer judgment, the spoken opinion. A man's opinions are his inner judgments ; they consist in processes of thought by which the connexion of one idea with another is asserted or denied.

The content of the mind has now expanded : it has not only sense-impressions and the memory of sense-given data, but also ideas for which there is no counterpart in the sense-world. While the objects exist in the outer world, their relations are the work of the mind ; equality, difference, even Being itself is an object for the mind only. Abstracted from these relations the mere sensation becomes wholly irrational, meaningless, and empty of being ; it has no share in knowledge, and is so far from being the substantial core of our understanding that it proves to be ultimately a meaningless abstraction. The fallacy of sensationalism lies in its persistent habit of constructing the history of the mind backward ; it finds

in sensation the last product of analysis, and then makes it the first element of construction. The truth rather is that sensations are the occasions for our mental activities. The mind develops, and its development is marked by an increasing complexity. In the idea of development is found the explanation of error. There is, as it were, a twilight of the mind, in which ideas are sorted and united incongruously. This stage, the stage of opinion, is liable to error; opinion may be right or wrong. If opinion were knowledge it would follow that in error we had knowledge and knew what we did not know; being only a stage on the road to knowledge, opinion is assent to judgments that unite ideas. Right opinion correctly unites ideas in its judgments; false opinion results from incorrect union of ideas; in both the ideas are known as ideas, but not understood as parts of a system of ideas.

The result of the argument is to show what knowledge is not. It shows two things: first, that psychological and logical conviction are different; certainty is a subjective condition possible whether the opinion is right or wrong: secondly, that mental conditions have degrees of development. Even in knowledge itself Plato admits the difference between latent possession and active envisaging; it is possible to have knowledge and not bring it into the full light of consciousness.

§ 3. These are the conclusions at which Plato arrives when he considers the soul in relation to the world and in itself. There still remain the phenomena which are due to the composite nature of man, the feelings. To understand these we must consider man as a whole, a composite unity. The theory of feeling is closely associated with doctrines of sensation and of desire. Sensations, as we have seen, are explained on the basis of motion; the question of feeling is primarily a question of the relation

between sensation and feeling ; for feelings differ from sensations, and some explanation of this difference is required.

In the earlier doctrine of the Cyrenaics the difference between sensation and feeling had been expressed as a difference in the quality of movement. Sensation, they said, is a movement: it acquires the quality of pleasure or pain from being either gentle or violent. It is possible to conceive also a third state, in which the motion is imperceptible; there are therefore three possible conditions:

(*a*) Imperceptible movement: absence of pleasure and pain.

(*b*) Perceptible gentle movement: pleasure.

(*c*) Perceptible violent movement: pain.

Starting from this position, Plato finds in it two objectionable features. First, it is a doctrine of relativity. Any attempt to reduce the world to mere relations was opposed by Plato; he asserts continually that there must be something positive and real, things as well as relations between things. Secondly, it is a mechanical doctrine, resting entirely on fact and disregarding significance. The mere statement that pleasure is a quantity of motion cannot be accepted by Plato, because it implies no teleological estimate of the facts.

As revised by Plato the theory appears in the following form. Sensation is attended by emotion when it passes from a slight and imperceptible to a more violent degree of motion. The quality of being pleasant or painful is due to the direction of the movement according as that is natural or unnatural. Thus quality is added to quantity and interpreted as conformity or want of conformity to nature. If we add that "natural" means productive of the Good and this good is an object outside the range of the Becoming (an Idea), the teleological character of the theory will be obvious.

A like result is obtained if desire is made the starting point of the inquiry. All desire is a movement of the soul from a state of want to a state of completeness. In some cases it rests on experience, and the desire is an inclination toward an object or state given in a previous experience. In addition to this type of desire, there is also that which is usually called "instinct," the natural striving of the soul after its natural or real fulfilment. Here again we find the teleological view predominant. There are certain desires and objects of desire such that their adaptation one to another is a part of the order of the universe. Thirst, for example, is a natural desire and drink is its natural complement. The actual idea of the object is usually more complex: for example, the object is thought of as "warm drink," and an element is thus added which is a product of experience. Desires may therefore be distinguished as primary and secondary, or as innate and acquired.

The unity of conscious life is never overlooked by Plato, and involves a close connexion between sensation, memory, desire, and judgment. All emotions belong to the soul, for they are conscious states, and therefore in some way connected with knowledge. The body never has knowledge, however indispensable an instrument it may be to the attainment of knowledge in some cases; and therefore naturally the body is not the seat of desires or emotions. The soul when affected by desire is in a condition essentially painful; for desire is consciousness of incompleteness. But there is no desire totally devoid of pleasure; for desire is a tendency to greater perfection, and that in itself is pleasant.

The want is a definite feeling due to a condition of the body. Co-existent with this is the desire for that which satisfies the want. The satisfaction is the opposite of the want: it is absent when want is present. Since the

body is occupied by the want, that which is concerned with the fulfilment must be the soul. Desire, then, is a non-corporeal function: it belongs to the soul and involves memory.

The soul knows itself and knows also the body. Pains and pleasures arise from both sources, though as known the affections are in the soul. Since the source is two-fold, affections can be classified according as they belong to body or to soul or to both at once. Again, pleasures are distinguished as mixed or unmixed. The mixed pleasures are found in each of the former classes. In affections of the body there is a mixture, for example, of the pain due to cold and the pleasure of growing warm. In affections of the soul, fear, regret, lamentation, love, and jealousy, there is mixed feeling; in tragedies and comedies pain and pleasure are felt at once; tragedy arouses a "pleasing horror," and comedy presents the ridiculous and therefore arouses pity and laughter. In the case where body and soul are both affected another type of complexity occurs: the body may be in pain while the soul has pleasure, e.g. the pain of hunger combined with pleasure of expectation, or body and soul may both be in pain as when pain of the body is joined with despair of relief. The unmixed pleasures belong to the soul. They are such as arise from colours, figures, sounds, or smells, and are in general pleasures that are not preceded by pain; the intellectual pleasures are to be reckoned with these.

These we may call the psychological determinations of pleasure and pain. In the "Philebus" they are somewhat confused with ethical considerations of value. It is obvious that Plato's surrender of the original dualism of body and soul is only partial; the consciousness which is required for feelings admits an inner dualism, an opposition of reason and feeling identical with the opposition

of good and bad. The opposition of mind and body remains; mind is superior as cause and origin of motion; pleasure is always inferior, for it is an effect of that which moves or causes and the highest activity of mind being the apprehension of the Ideas and its own specific self-motion, all perceptions of pleasure are inferior. Pleasure is therefore not the final good: it is the quality of a process and disappears in the conclusion of the process; the process is the restoration of a natural state whose quality is neither pleasant nor painful but neutral.

Plato declined to accept that form of relativity which reduces pleasure to a mere negation, the negation of pain; but he recognises relativity in the other sense, and bases on it his argument against the Heraclitean dogma that no state can be permanent. From the view of life as perpetual change it seems to follow that no pleasure could persist for an appreciable time; there would always be a process of Becoming, the passage from one condition to another, but never a persistent state, a Being. The argument is analogous to that which reduces time to a transition from future to past and ignores the present. Plato's reply is based on the idea of imperceptible increments: it is not any change but a great change that produces pleasure or pain. Small changes are sub-conscious and do not necessarily amount to a perceptible difference of feeling. Thus pain and pleasure do not overlap; there is between them, as it were, an area of neutral ground within which man may abide.

In the theory of feelings expounded in the "Philebus" we see the origin of the moral struggle. To the soul in itself belong pleasures that are not preceded by want; to man as a mixed being belongs the dual consciousness of want and of possible satisfaction. As pleasures are known to be good or bad, there arises from this a moral struggle. We see from the "Republic" (Book IV) that this is a

conflict between desire and the spirit, ἐπιθυμία and θυμός. It is possible to yield to desire, and in so doing be angry with oneself: man is thus to some extent divided against himself when he does what is evil knowing that it is evil.

CHAPTER IX

THE PLATONIC VIEW OF MAN (III)

§ 1. In addition to his analysis of sense and intellect, Plato provides us with a psychology of education. He is not content with stating the nature of the ideal intellect, the mind of the man who views all things from the lofty standpoint of speculative insight; he indicates the way in which such an intellect may be formed. For Plato the true life of the soul is a continuation of that process by which at first order arose out of chaos; education is information, not the mere acquisition of knowledge, but the formation of mind, the process by which form is attained. Knowledge cannot be thrust into the soul from without nor attached to it as an ornament may be attached to the body; knowledge is activity, and the wise man is he who has acquired through training perfection in the exercise of his faculties. Education thus understood is a theory of life and sums up all the sciences that are concerned only with departments of life: it includes all that makes the soul more perfect and all that makes the body less a hindrance. For the discipline of the body athletic exercises are prescribed; for the discipline of mind intellectual pursuits are needed. Plato does not forget that the nature of man is tripartite, nor that life is more than the single purpose which a man may consciously keep before him. As there are in man reason, spirit, and desire, each of these must be affected by the training; for the whole is made of the parts and can only be reached through them. Hence the formation of the soul begins

with the indirect influence of beauty in the surroundings : upon this beauty the soul feeds and becomes like to that which it thus assimilates. In a more advanced stage direct instruction begins, not with the unemotional detail of science, but in the concrete ideals of sage and hero ; the memory for fact is still weak, but the young mind is impressionable and easily roused; the spirit (*θυμός*) glows and the zeal of emulation is awakened ; it is enough that this ambition be for the attainment of the good, that the mind has received its bent. When at last the irrational self has reached its years of discretion and the right spirit has been evolved, the intellect can be trained so that, passing through the realm of mathematical truths, it comes at last to the speculative vision of the Ideas and grasps the Idea of the Good. As there are in the world three natures—(1) the Ideas, or Limit, (2) the composite natures (*τὰ μικτὰ*), (3) the unlimited or matter—and as the soul is itself intermediary between Pure Forms and the Formless, so the process of development through which it goes is threefold : for there is first the process of moulding the material, irrational nature ; then the intermediary stage in which concrete embodiments of law are studied ; and finally the highest stage in which the laws of nature are made the subject of thought and the mind thinks over the last great law of all things, the Good in which they live and move and have their being. Plato was doubtless perfectly conscious of the latent mysticism of his doctrine ; he saw that the soul in turning round from darkness to light comes finally to itself ; above the unity which it contemplates in the world of things, a unity which it looks upon face to face, is the still higher unity in which it is itself included ; but from the mysticism of later schools Plato is saved by the fact that he does not regard the existent as wholly dependent on consciousness ; the Idea of the Good is like the sun in the heavens :

it reveals the world of intelligible things to the mind as the sun reveals to the eye its world of objects; but there is no suggestion in Plato that the object is ever other than external to the mind; consciousness of truth is never merely consciousness of self, and the mind does not contain the intelligible objects any more than the eye contains the world of things visible.

At the most speculative heights of his doctrine Plato is never far from the concrete world of practice. From this theory of the ideal intellect he turns naturally to the discussion of character. In the theory of education there are obvious traces of the medical doctrine of humours. The physiologist tended to make the nature of man wholly dependent upon the mixture of the elements and describe each temperament as due to the excess of one element over others in the mixture. Plato rightly treats the subject with reference to psychology rather than physiology; man is not merely a mixture of elements, he is a mixture of natures, and the science of temperaments requires as its complement a science of characters. Character depends largely on the extent to which one or other of the natures is developed; a man may be characterised by excess of passion, or of spirit, or of intellect. As there is in all things one way which is right and many that are wrong, so here the right proportion is one that permits the rule of the intellect. The study of man from this point of view involves a theory of conduct and brings us to the psychology of ethics.

§ 2. For Plato life is essentially conduct. As it is not possible to say everything at once, so it is not possible to avoid treating life as though it were a collection of activities: but as the parts of the soul make one soul and the parts of the State one State, so the parts of our life make one life whose extension, so to speak, is conduct. In the

theory of conduct Plato reaches the true goal of his exhaustive study of man. If we look at the soul from the point of view of its activity we find that its parts are knit together by the conative element, the Eros which is an impulse toward the attainment of a desired end. This reaching out after the unattained is the way in which life expresses itself: through it the being becomes conscious of its needs. Life then becomes a perpetual striving after the fulfilment of the need, whether it be for physical or spiritual satisfaction. To be able to fulfil the need adequately the creature must clearly understand what the need implies; the impulse must not be blind but work with its end in full view and clearly lighted. Hence, true to the Socratic teaching, Plato realises that the first and greatest condition of successful life is the knowledge of the end. There can be no stopping short of the end of ends, the universe itself, the all beyond which there is nothing; life must rest on truth that has no hypothesis. This is the reason why Plato spends so much time and trouble in expounding the nature of the intellect and its end; but the intellect is for him the light that lighteth every man, and while, in the process, we live that we may know, in the end we find that the knowledge has been the guide and master of our daily life.

It is unfortunate that Platonism is frequently regarded as "intellectualism," the term meaning (if anything) a theory of life as the passionless contemplation of truth, the primacy of the will to know. The foundation of this view will be seen if we consider Plato's actual position, which is ultimately a theory of the will to live.

Desire is a condition of the soul, and all desire is ultimately of one kind, the creature's recognition of incompleteness. Desire may be either physical or psychic in respect of its origin; but its satisfaction requires an idea of the object, and must therefore depend on the mind.

The will (which in Plato is not expressly distinguished from the desire or impulse) depends upon the mind's grasp of an end; the creature acts in the way which it thinks best. All conduct is therefore in the first case merely doing what one thinks best. A theory of conduct involves reflection, and right conduct can only be achieved when that which is thought best is at the same time truly and really the best. Hence the impulse must come under the rule of the mind, and the mind must be trained to think rightly. In a sense therefore the will, in Plato, is not free; the result is an intellectual determinism. But for Plato the distinction would be meaningless: the control of impulse by reason is only the attainment of harmony within the individual who thus attains his true freedom.

Men act for ends which they approve; they live for that which they like, and their likings reflect their nature. The common element in all cases is the liking (φιλία); the distinction of characters depends upon the tendency of the likings, and this again depends on the balance of the elements in the nature of man: evil likings arise from natures in which the evil elements predominate. Plato would not admit that the liking is neither good nor bad, but is made such by its object; he would not say that a good pleasure means a pleasure in that which is good. On the contrary, the liking is a quality of the nature, and its goodness or badness is an intrinsic quality exhibited in the choice of ends which are also independently good or bad. On the other hand, it is not correct to suppose that an evil nature is one in which the lower elements are active.[1] There are degrees of goodness, and, while in man the parts of his soul are related as superior and inferior, so that the good of the higher part is better than that of the lower, there is none the less an excellence of each part. In the analogy between man and the state

[1] See note, p. 365.

we find a distinctive excellence allotted to each part of the state, and, correspondingly, to each part of man. Reason has for its excellence (or virtue) wisdom; spirit has courage; desire has temperance; and the three are fused into one by a law of relations, that rule of co-operation which constitutes Justice. Evil, therefore, is not the possession of any one part, whether higher or lower; it consists entirely in the breach of proper relations between the parts. As the type is realised by a correct mixture, as the essence of the good is due proportion (μετριότης), so that activity which is good rests upon and expresses a nature duly proportioned and balanced.

The theory of education thus elaborated is really a doctrine of development. The soul is situated between a worse and a better: it has the potency of good and a vague innate consciousness of an Absolute Good toward which it may strive. The Pythagorean strain in Platonism comes out in this: there is no substantial unity of soul and body but only a mode of co-existence; this is the state in which the soul is set to work out its own salvation, and the salvation is attained by purification, not the lustrations of magic ritual but the asceticism of reason. No part of Plato's teaching belongs so vitally to his thought as this idea of the ascent of man through discipline; no part of Platonism commanded more attention in later days; for by this ascent man becomes like God, and Christian writers found in that idea the real value of heathen philosophy.

§ 3. Platonism, as maintained by the immediate successors of Plato, is marked by a strong tendency toward speculations that deal with the abstract rather than the concrete. Aristotle's influence made the Peripatetic school a school of natural science; the Academy was more interested in mathematics than in natural science,

and kept nearer to the ideals of deductive reasoning. The basis of Platonism, the ethical doctrine, remains practically unaltered: it is in the sphere of metaphysics that new developments arise. The strain of Pythagorism found in Plato lends itself to expansion in the hands of a disciple whose interest is in mathematics. Speusippus, starting from the idea of a World-Soul and universal Reason, formulates the rational element in the universe as mathematical numbers, i.e. abstract determinations which are prior to concrete existing things, and are the essences which can be known by Reason. The soul is defined as a number; being an immaterial essence it occupies a position between matter and God analogous to that of mathematics between the formless and pure form. The meaning of this may be guessed from the views of Xenocrates.

Human reason has two classes of objects, the objects of reason and objects of sense. The former are known by mediate thought, the latter by immediate intellectual perception (ἐπιστημονική αἴσθησις). This doctrine of a "scientific sense" is interesting as an indication of the fact that the Platonists were troubled by the gulf between sensation and thought. Pressure was brought upon them to explain the relation between inductive universals and absolute first principles: the result was this attempt to show that direct perception contains an element of universality and is not wholly outside the sphere of rational activities. Aristotle met the difficulty in a similar way, but the exact meaning of Speusippus is a matter of conjecture. Another point in the teaching of Speusippus deserves mention. He makes pleasure and pain evil, opposing both to the Good. It follows that the good states or the virtues are states of apathy. The normal state or nature (φύσις) is a state of rest (ἠρεμία); a doctrine that fore-

shadows the Stoic development of the concept of nature.

§ 4. Xenocrates continues the Pythagorising method of Speusippus. He derives the soul from Unity and Duality and calls it a self-moved number, combining the idea of form with that of activity or causality. The source of his definition must be sought in two ideas : first, that the soul is immaterial and concerned with cognition ; secondly, that the immaterial objects which alone are knowable by an immaterial soul, are the eternal principles, or laws of production. The fundamental problem for the Platonist was to resolve material things into immaterial principles ; he strove to do this by making the object a complex of universals, thus proving that its abiding reality was an intelligible essence. Mathematics afforded the typical case in which the principle was permanent and the particular matter was unimportant ; the properties of the circle were the same always whether the object was made of wood or iron. It is unnecessary to point out the weakness of such a position.

The universe is pervaded by soul and nothing is without soul : the animals share in it. Soul is purely spiritual and exists apart from the body ; reason comes to man from a previous state, and even the irrational part is immortal. Plato's tripartite division is given up in favour of a dualism of rational and irrational, perhaps already indicated by Plato's division of the soul into immortal and mortal parts.[1] Also the four forms of cognition recognised by Plato are reduced to three—thought, perception, opinion : the first apprehends truth, the second has a degree of truth, and the third is sometimes true and sometimes false.

[1] See note, p. 365.

CHAPTER X

THE PSYCHOLOGY OF ARISTOTLE (I)

§ 1. BEFORE Plato we observe in all statements about the nature and function of soul a combination of crude observation with deductions from general principles. In Plato this method of procedure is still more obvious, and the sphere of its application is enlarged. On the one hand, the metaphysics of thought and motion furnish a double source for a priori assertions; on the other, increased interest in man as a responsible agent demands some account of the psychology of conduct. The more definite severance of one line of thought from another marks the contrast between Aristotle and Plato. Plato has mapped out the whole field of observation; Aristotle diligently works upon the different parts and exhausts the resources of his time in his careful description of the phenomena of psychic life.

Aristotle approaches the subject of psychology from the side of metaphysics: he descends from the standpoint which comprehends all being to the consideration of the special fields of inquiry.

All things that are known can be arranged on a scale ascending from pure matter to pure form. The objects of scientific knowledge are always a mixture of matter and form; and position on the scale of being is determined by the degree to which form is realised. The inorganic occupies the lowest place; then comes the organic, which realises a unity and exhibits activities in accordance with its unitary nature. As the soul is ultimately a principle

of life, psychology in its widest sense includes the actions that manifest life in all creatures. As the higher includes the lower we may take the human soul as the direct object of investigation.

Proceeding upward from inert matter we arrive at a point in the scale of being at which matter presents itself in organised forms. The mark of an organism is its power of self-maintenance, its capacity for initiating action which takes effect on the environment: in modern language, a power of reaction. In man this power is threefold: he absorbs nutriment, perceives objects, and transcends the immediate moment of perception in thought. These three modes of activity are called "souls," namely, the nutritive, the sensitive, and the rational. Apparently one grade of activity may be attained without further progress; plants appear only to assimilate nutritive matter; animals combine with that function a power of discrimination; man has all three capacities. If it were not for these apparent instances, the parts of the soul would be merely distinctions in the direction of psychic activity, and in man they are in fact hardly more than that. Their separate existence in the world of nature is, however, a justification for speaking of them as separate "souls."

If we look at these three grades of being, the plant, the animal, and man, we see that soul, in so far as it is common to all three, must be defined as the first complete attainment of form on the part of an aggregate of matter. In this definition Aristotle is answering the question, when and where does soul begin? A statue is matter and has form; has it therefore a soul? Obviously not; observation guarantees that reply. It is not, therefore, all matter that by form comes to life: it is only such material aggregates as are potentially living, such as are destined by their nature to realise themselves in that

form of being which is life. Life, therefore, is a term not co-extensive with being or motion; the universe contains that which can and that which cannot realise life or have life for its realisation; the universe, therefore, is not itself a living whole, and Plato's ideas upon that subject must be rejected.

In this limitation of the sphere of psychology Aristotle is consciously applying a method. His logic requires him to say what the specific difference is which marks off life from existence. Observation shows that many things exist which no one calls living; and this distinction is first defined. Looked at from another point of view, life is not merely a form of existence; it is directly opposed to the mere being of an object, the being for me of the stone at which I look. In more technical language, we may say that the logical determination of the being of soul is not enough: we must not only decide the sense in which it comes under the category of being, but also explain the being in some way that will satisfy our idea of its causality, its liveliness. This Aristotle does by calling the soul an actualisation. When the matter does, in fact, become actual, when it begins to do work, we have living matter and soul.

It is impossible to understand Aristotle without clear ideas of his method of thought. From what has already been said, it will be clear that Aristotle regards the soul as a substance; it is capable of being a subject of predication, and many phenomena seem to require some concept of soul for their explanation. There is therefore no tendency in Aristotle to regard the soul as unreal; but he is perfectly clear that the sciences deal with phenomena, with activities, their nature, origin, and purpose. Plato had also seen this, and became aware that there was a field of psychological observation into which ideas of eternity or immortality need not enter: Aristotle develops

this aspect, and all his views on the phenomena of life can be explained with no further reference to the metaphysical considerations, which form, as it were, the prologue and the epilogue to the story.

§ 2. From this analysis of Aristotle's definition it is clear that the living creature can be regarded from two points of view, that of matter and that of form. The aggregates of matter which actually attain life are always and only those that have parts adapted to the functions of life. For this reason Aristotle adds a limitation: the natural body which has the potency of life is always "organic"; man is obviously provided with "organs," the sense-organs, for example; and Aristotle includes the plants by calling their roots "organs" of nutrition. When such an aggregate attains its complete state it is filled with the principle of life. The soul thus attained transforms the whole structure. Soul and body cannot be defined out of relation to each other; a dead body is properly only matter; for the soul is the essence, the true being of that which we call body. It is from this point of view that Aristotle compares the soul to the functional value of an instrument: the soul is to the body what the power of cutting is to the axe: it is its functional reality. A difficulty arises when we try to combine this idea with the statement that the body is the instrument of the soul; but, with a certain amount of latitude, it may be conceded that the concrete point of view which makes soul and body an indivisible unity is not incompatible with the idea of organs that carry out the movements initiated by the soul.

Substances are classified by Aristotle as form, matter, and the combinations of form and matter. These are the ultimate classes or types of reality. Body considered apart from soul, i.e. as a potentiality, is matter; soul, regarded

in abstraction, is form. The actual sphere of psychology is the combination of matter and form, body and soul, τὸ ἔμψυχον. Here the soul is entelechy; primarily it is a "first entelechy," a resident possibility of psychic activities. This can be explained by analogy: an eye has the power of sight even when it is looking at nothing; man has the power of active thinking even when asleep; and similarly the soul is a "first entelechy" when regarded as the potentiality of its own full activity. In technical language, the "first entelechy" is mere possession of soul-powers (ἕξις), while the second entelechy is their actuality (ἐνέργεια τῆς ἕξεως).

It is now obvious that the metaphysical view of the soul is that which concerns itself with such problems as cannot be called physical. The sphere of physical inquiry falls within the larger area of metaphysical problems, and may be treated separately. The physical theory is the natural science of the soul and becomes in Aristotle's hands mainly biological in character. The first result of this biological trend is to shift interest from being to doing; the nature of the soul is, accordingly, reached through a study of its functions. This necessitates a new attitude toward the question of parts of the soul. Aristotle finally recognises no "parts" of the soul, but he frequently adopts the language of other schools or of current opinion, and also fails to free himself entirely from the influence of those who had previously divided man, as with a hatchet, into rational and irrational natures. There are two modes of division: one is spatial separation of part from part, the other is logical distinction. The Platonists went too far in their talk about "parts," and laid themselves open to the charge of localising different "souls" in different parts of the body. This involves a second soul to unite these souls (for there must be unity) and so to infinity. The objections to such division

are obvious, and Aristotle rejects both the tripartite division of Plato and the dual division of Xenocrates. The only true basis of division is that which starts from functions and classifies them; if such a classification is natural it will put together those manifestations of soul-life that are most alike. In this way it is possible to make a working classification of functions as capacities of nutrition, sensation, thought, and motion, regarding the soul as the basis of all these. When speaking with a view to problems of conduct Aristotle employs the popular distinction of rational and irrational parts, subdividing the irrational into two parts, one of which is entirely beyond the reach of reason, while the other is amenable to the control of reason. No importance can be attached to this treatment, as it is obviously a mere convenience and not a theory. The fourfold classification given above is the nearest approach Aristotle makes to a definite theory of "parts": it belongs essentially to the physical science of the soul; a much more serious division becomes apparent when we take the word soul in its widest possible sense and consider the relation of pure reason to the understanding.

§ 3. Aristotle starts from a strictly psychophysical standpoint, and is inclined to give a dual explanation of the phenomena of life according as the physical or psychic aspect is considered. It will be useful to summarise the main points in Aristotle's physiology which affect his exposition of psychic activities.

In respect to nutrition, Aristotle thought that food was transmitted to the stomach and there cooked by the animal heat. It is "made liquid in the stomach and intestines, and this liquid *steams* up through the small vessels of the mesentery, which lead to the larger vessels, and thence to the heart: *there* it ceases to be ichor and

becomes blood." Of the vascular system Aristotle had no correct knowledge. The heart is the central seat of life, sensation, motion, and heat. These are intimately united: heat is a principle of expansion, while contraction is produced by the cold air which rushes into the space thus created; the heart is the place from which the tendons arise, and these tendons move the limbs.

This view, in itself groundless, makes easy the explanations of motions that result from feelings: the parts of animals are capable of changes and may become larger or smaller under the influence of heat or cold or imagination or even thought. Ideas, whether as images or as thoughts, are consequently kinæsthetic and automatically generate motion. The actual medium by which the soul produces motion in the body is the pneuma.

The brain is given an inferior position in the organism. One reason for this is its locality; the heart occupies the noblest position and has an a priori claim to be regarded as the seat of the noblest functions. The brain is cold, and its function is to counteract excessive heat of the heart. Nerves were unknown to Aristotle, and their place is taken, to some extent, by channels (πόροι), which contain the spirits. There is no adequate explanation of the way in which the heart assists sensation, for blood is not sensitive. The only argument in its favour is the actual observation that the brain is insensible: a fact which seemed to exclude that claimant and leave the field open for the a priori argument in favour of the heart.

CHAPTER XI

THE PSYCHOLOGY OF ARISTOTLE (II)

§ 1. The vegetative functions carried on by a soul-endowed body are of interest only when they come into consciousness. Although, in order to proceed methodically the nutritive soul should be first considered, the primary importance of consciousness justifies us in beginning from sensation.

Sensation is primarily a faculty of discrimination. Its antecedent in the wider realm of physics is motion, for the perceptions of sense arise when a movement comes through the body to the soul. But in its own nature sensation is unique: it is not a motion at all from the inner point of view; it is a form of knowledge, and knowledge is primarily the cognition of an object with respect to what it is or is not. Discrimination is therefore the primary characteristic of sensation: the sense as such discriminates qualities as, e.g., black and white in vision, sweet and bitter in taste.

Another passage of the "De Anima" tells us that sense is receptive of form without matter. The object produces an impression, as the seal does on wax; as the object is in its activity such also is the sensation or activity of the sense-organ. The object of sensation does not transmit any material thing to the soul: the stone I see is not in my soul, nor are any particles or emanations lodged in my soul; the truth is rather, that objects condition the way in which the soul acts, dictate the form of that activity. If the sensation is true, the activity of the soul

must correspond to the nature of the object: the common element, then, between perceiver and perceived is not a material thing but a form, and sense can be described as receptive of form. To prevent confusion, we must further remember that receptivity here implies passivity: what actually happens is that the sense changes from one form to another or from lack of form to form; in so far as sensation of something differs from no sensation there must have occurred a definite change relative to a definite object. A sense is receptive in so far as it admits changes which come from without.

The value of this definition of sense in terms of function is very great. It breaks away from those early ideas of transmission of particles which had never explained sensation at all: it succeeds in showing the significance of contact as the condition of sensation; and it settles the question whether perception demands a relation of like to like or unlike to unlike. The object is always unlike the sense-organ; its reality as perceptible consists in its power of affecting the organ: by that power it arouses an activity of the organ and, as that is the sensation, the object is assimilated by the organ in the act of sensation. An object that does not admit of this assimilation cannot be perceived: it is like food that cannot be digested.

§ 2. Aristotle's account of the special senses exhibits the working of his main principles. His writing on these topics shows a scientific spirit, free from harmful presuppositions and alive to the value of detailed observation. This attitude of mind is best expressed by saying that Aristotle gives prominence to biological valuations. Plato had formulated the idea of man as a "political creature," as a being formed in and for society, but the metaphysical consideration of first causes makes him rather half-hearted in the pursuit of that scientific knowledge which

deals with second causes and admits but little insight into anything beyond. Aristotle has a more fully defined idea of the good life: within the life of the cosmos falls that of the state; within the state is the individual; and as the life of the citizen is the proximate universal by which we judge the standard of conduct or practice in the case of the individual, so the individual's life is a universal that comprehends many species. The psychological functions, embracing as they do the whole individual life, are valued according as they further its excellence more or less. On this basis Aristotle ranks the senses in the following order: touch and taste are most important for life; smelling, seeing, hearing are not only useful for life, but enter into the concept of the good life, the life that rises above the merely necessary to a state of culture. This notion of the relation of the senses to the general scheme of existence does not enter into psychology further. Another idea, that of the mean, is a distinct guiding principle in the actual development of the theories. Sensation is a discriminative faculty. The differences which it perceives are real differences between objects, qualities of the objects perceived; but they are also relative differences, for their perception depends upon a relation between object and sense. Hence in the sphere of any given sense-faculty we have a double scale. There are, on the one hand, the extremes and the middle states in respect of the object, and on the other the extremes and the middle states in respect of the subject. In some cases the objective scale overlaps the subjective, as when the objective cause of sound produces no perception from being too slight or is too great to admit of discrimination, sound becoming noise. The language of Aristotle distinguishes in each sense the activity from the cause. These are defined relatively; only that stimulus can be called a stimulus of hearing which is actually at some time

heard. On its objective side the stimulus, when not realised in sensation, comes under the general head of motion. The world in which we live is a world of motions, all capable of being quantitatively related to each other, as more or less; and of these some are realised in relation to our organism and produce the qualitative change called sensation. For example: "If we touch something and pronounce it hard, the hand itself must be soft as compared with what it touches; and similarly, if with the same hand we touch something else and pronounce it soft, the hand must be hard compared with what it now touches. The same hand, then, must be soft to the one thing, hard to the other, and we perceive in the first case the excess, and in the second the defect of hardness, in the object as compared with the hand."[1] From the excess and defect in this case we see that the mean belongs to the organ: it has its own state which serves as the norm and fixes the mean in any sensation; the sensation is knowledge of the difference, discrimination. The doctrine of the senses requires now a statement of three things: (i) the nature of the organ, (ii) its mode of relation to objects, (iii) the nature of the sensations.

§ 3. (*a*) We begin with touch as being the most important. In opposition to the popular view, Aristotle maintains that flesh (*σάρξ*) is not the organ, but only the medium. Touch is thus brought into line with the other sensations. The true organ of touch is something within, possibly the heart. Man is surrounded with flesh just as he is surrounded by air; the flesh covers him like a membrane, and when the object is touched or touches us, it pierces through the covering to the inner organ of sensation. The medium has in this case the peculiarity of being inseparable from us: unlike air or water it is essentially

[1] Hicks, "De Anima," 424 a 2 note.

part of us; for which reason it has been overlooked in those previous theories which made touch merely contact of the object and the flesh.

A faculty is defined by reference to its object. Touch is the sense of the tangible; but this sphere is not simple; it includes (*a*) the hot and the cold, (*b*) the fluid and the solid. As these are not reducible to one we have to accept the conclusion that the sense of touch is not clearly explicable: it remains for us complex, and includes the senses of touch and of temperature.

(*b*) Taste is analogous to touch in being a sense whose medium is a part of the organism. It differs from touch in so far as medium and organ are one, the tongue. In both cases the organ is connected with the heart, and that is the "foundation of the senses."

Touch and taste are both senses connected with nutrition. Aristotle rejects the reduction of all senses to touch, but he considers taste is a form of touch; the nutrient matter must come into actual contact. We now see why flesh is the *medium* but not the *organ* of touch. Contact as such is not a cause of sensation: mere juxtaposition is useless; all sensation requires for its production some medium between the outer object and the organ.

(*c*) The sense of smell comes midway between touch and taste on one side, and sight and hearing on the other, i.e. it comes between those that are forms of touch and those that require a medium capable of overcoming the difficulty of distance. The organ of smell is the nose (or its analogue, the olfactory passages in birds) in the case of animals that breathe: it is constituted of air and smelling occurs in inhalation. In the case of fish the process is the same, but gills and water are the organ and element respectively. The medium, then, is air (or water) conveyed into the channels of the nose (or gills),

and then producing the sensation by means of the connatural spirit (σύμφυτον πνεῦμα). The stimulus thus reaches the heart.

The process by which we perceive odour is to be distinguished from a doctrine of emanation. Aristotle's meaning is that a motion is propagated by the object in the medium, and by the medium in the sense which transmits it to the heart.

Aristotle, in opposition to Plato, asserts that there are species of odours: some are pleasant accidentally, such, for example, as become pleasant through hunger when the animal is pleased by the smell of food; others are pleasant in themselves, as the smell of flowers. The pleasure in this case also has a biological significance; the pleasures in question are due to the fact that odours are light and ascend to the brain, making it healthy.

(*d*) The organ of hearing, the ear, is composed of air. The medium of sound is the external air. The process of which hearing is the result is a change in the medium produced by either (*a*) the collision of two sonant bodies, such as brass plates, or (*b*) the purposive expulsion of air through the larynx. Aristotle here adds to Plato's vocal sound (φωνή) the more general object of hearing, noise (ψόφος). Great stress is laid on the function of the external ear and the intra-cranial cavities. The shape of the ear enables it to act like a funnel, conducting the moving medium to the point at which the spirits natural to animals are also in motion. Thus there is a complete chain of movement from the first impulse given by the object up to the "soul," the centre at which there is conscious realisation of sensation. Hearing has the peculiarity of being a sense which meditates between minds—between teacher and pupil, for example. Sounds are divisible into classes, non-vocal and vocal; the vocal can be subdivided according as they are or are not signifi-

cant. Intelligible sounds obviously have a new and, according to Aristotle, "accidental" importance analogous to the symbolic value of some objects of sight, e.g. written letters. In one other respect hearing has importance: harmony has emotional quality, and music can be made a factor in the formation of the soul; for every musical mode has a character and tends to produce in the hearer a similar character.

(*e*) The first attempts to frame a theory of vision started from the elements contained in the eye. These were supposed to be fire and water. The water acts as a mirror and explains the reflection on the surface of the eye, which is seen by one person looking into the eyes of another. The fire is an active power which seems to be sent out to the object, so that the eye might be said to illuminate its own object, as a lantern lights a road.

Alcmæon treated vision as a problem of physiology: he stated the parts of the eye and added a theory of their functions. But he either failed to explain vision or his explanation has been lost. After him came Empedocles with a theory that was based on cosmological notions, vision being treated as a special case of the relations between man and the universe. It is clear that when Empedocles formed his theory common opinion was inclined to assume an active and a passive element in vision. The active element or "looking" was distinguished from the passive element or "seeing," and this distinction persists afterwards. Looking is an act and a cause; seeing is an effect and requires a cause. So in Empedocles we get the elaborate simile of the eye and the lantern. As a lantern illumines the object, so the eye sends out light and makes things visible. But the eye also receives impressions; emanations come into it and these are then perceived under the universal law that like perceives like. At this point our knowledge about

Empedocles breaks down. We require to know whether the inner fire goes right out of the eye to the object, or only reaches to the outer surface of the eye. The point cannot be decided: there is some comfort in the reflection that Plato probably knew the theory and preserved the essence of it in his own explanation of vision.

The emphasis which Alcmæon laid on the water in the eye, and the assertion of Empedocles that the eye contains the elements earth, air, fire, and water, each of which perceives its "like," point to the significant conclusion that the image in the pupil was taken to be the real object of vision. This is a natural mistake to make: it was certainly made by Democritus, whose whole theory of vision is an attempt to show how that image gets into the eye. Empedocles spoke of "emanations"; Democritus speaks of "images." The former are merely particles which come from the object to the organ of sense; the latter are floating pictures of objects which enter the eye as representations of things. This picture-theory is, if anything, retrograde. It was necessary to go back to the idea of vision as the effect of sense-stimulation without this idea of "copies" of things. The Platonic theory is known as the doctrine of "synaugeia" (συναυγεία), or "union of rays." According to this, the light or fire in the eye proceeds outward: it does not reach to the object but transforms the air, making it of a similar nature; thus eye and object are connected by a homogeneous medium. The object sets up a movement in this medium, which, because it is everywhere of the same kind, transmits that motion without interruption. The result is the sensation of sight.

In this theory Plato skilfully combines all the problems and finds a solution for them all. The solution is theoretical in the sense that an algebraic problem is theoretically solved; in other words, he resolves all the difficulties that

exist in current theories with reference to everything except experience. This is characteristic of science when devoid of experiment. The difficulties and their solutions are these : first, the element of " looking " is accounted for by retaining the ocular fire ; secondly, the fact that we see only in the direction in which we look is explained by saying that the ocular ray transforms the surrounding air in the direction in which it goes, and *only* the transformed air is capable of transmitting the motion ; thirdly, the part played by the object is recognised ; fourthly, the image in the eye is ignored and the difficulties of reflection which it caused are removed. These are the qualities which made Plato's doctrine worthy of the attention which it afterwards received.

This sketch of preceding theories shows the problems and solutions which Aristotle had before him when he framed his own theory. He, no less than his predecessors, is concerned primarily with the explanation of the relation between eye and object, with the conditions of sight rather than the psychological fact of sight-perception. The first point, therefore, is to decide the medium of vision. This, as Plato had seen, must explain both how we see and why we do not see : it must explain the significance of light and darkness. Aristotle's persistent categories are those of potentiality and actuality ; sight is an actualisation of a medium which in darkness exists potentially. This medium cannot belong to the eye only—for we *look* in the dark but do not see ; nor can it belong to the object, for that exists though it is not seen. It must therefore be something which, when actualised, makes actual the relation of object and eye. Aristotle thus deduces (for we must regard it as a deduction, not as an experimental discovery) the nature of the diaphanous (τὸ διαφανές). The object of vision, it must be remembered, is determined from the point of view of sight, and

each sense has a specific object. It is not the same as the object of touch, for we touch in the dark what we do not see: it is not the "thing" in general, but the visible thing, that is colour. If, then, colour is the object it is not also the medium, and the diaphanous is not colour; neither is the diaphanous air, for air has colour in so far as it is seen. Aristotle makes the nature of the diaphanous so completely a matter of deduction from the analysis of sight that the only way to describe it is to say that it is the objective condition of seeing, the universal possibility which in its actuality constitutes the indispensable condition of all seeing. The process then is as follows. The diaphanous becoming actual constitutes light; colour depends on light as light depends on the diaphanous; colour is that qualification of the light which is propagated through the diaphanous to the eye; it is therefore the true object of vision.

So far Aristotle has solved the problem of the relation between the eye and its object. The further question remains, How does the soul perceive what the eye sees? Aristotle maintains that the eye consists of water, for this is diaphanous, and thus the external and the internal media are alike. This water is supplied to the eye from the brain, the eye being in fact a "focus" of the brain. Thus a movement proceeds from the object to the eye, and through that "inwards" until it results in vision.[1]

Looking back on this theory we see how much progress has been made. The idea of a fire from the eye is re-

[1] The failure at this point is apparent: the point is well stated in Prof. Beare, op. cit., 87: "As to the nature of the κίνησις, as a fact of physics, modern science has far outrun the simple and vague notions of Aristotle. . . . But as to the nature of the further κίνησις which connects the retinal image with the sensorium . . . how that which, externally regarded, is but a tiny picture is translated into a fact of consciousness, no more is known now than was known in Aristotle's days." We might add that the truth of this comment depends on the assumption that the problem is approached in Aristotle's way.

jected. Plato had been compelled to explain our inability to see in the dark as due to the extinction of this fire by the darkness, which Aristotle condemns as nonsense. The image on the pupil is now clearly recognised as only one case of reflection, analogous to that in a mirror, and Aristotle realises that if the image is the cause of vision there is no reason why the mirror should not see. On the other hand, the idea of Democritus that colour is purely subjective is corrected by making it dependent upon the object both for its production and its definite character. Aristotle has no conception of a world which exists only for mind; but he has the power of placing himself at a point of view from which he can distinguish the elements of an experience before they are fused in the experience.

§ 4. Throughout the psychology of Aristotle we meet with continual reference to the "connatural spirits," the *συμφυτόν πνεῦμα*. This is a subject of great importance in later psychology, and it will be convenient here to sum up the doctrine of the pneuma as we have it before and in Aristotle.

The obvious relation of breath to life leads to the natural primitive view that air and the principle of life are either akin or identical. Life is activity, and this activity is exhibited as intaking and outgiving, notably in inspiration and expiration. For the physical philosopher attracted by the idea that man is the microcosm and the universe a corresponding macrocosm, this becomes part of a cosmological theory as we have it in Anaximenes or Diogenes of Apollonia. It is a fallacy to interpret these theories in terms of "spirit" in any sense which that word acquires from later associations. The philosopher looked upon the air as the scientist of to-day might look upon the steam in the locomotive: its laws of expansion and contraction were the explanation of life as a mechani-

cal system of activities. The point of view is the same in the case of the medical men, though their interest is more directly centred upon living organisms and concerned with the principles of health and disease. Digestion and climate are with them the main objects of attention, and the inner heat of the body forms the centre of investigation. The body has a "natural" fire or principle of heat, and this is nourished by the pneuma. Diogenes of Apollonia makes the air in the organism the medium by which all sense-affections are brought to consciousness. Thus air comes to be at once the inner principle of organic and rational life. In Aristotle the connatural spirit contains the vital heat and is found in all things that have life (ζωή); it is the life-principle (ζωτικὴ ἀρχή) which resides in the heart. Sensations are conveyed to the central seat of sensation, the heart, by that which fills the veins; and the veins are filled with blood and pneuma. Through the influence of the medical writers the inner pneuma has become distinct from the outer pneuma, i.e. the air which we breathe. The inner pneuma is a secretion resulting from processes going on in the body; it moves with the blood and is said to depend on the blood for existence (possibly because loss of blood reduces vitality). The active element is of the nature of fire (τὸ θερμόν), and this is the principle of fertility in seed: this heat is not distinguished from pneuma except in so far as the pneuma may lose its principle of heat and so become insufficient. There is apparently a definite ratio required in the composite substance consisting of blood and pneuma which fills the veins; excess of the blood-element reduces vitality, as in sleep; death may be due to exhaustion of heat, though excess of heat may also destroy the exact balance of elements which makes life possible.

The most interesting part of Aristotle's theory is the

use of the pneuma in all sense-experience. The organs of sense are in every case constructed to propagate the outer movements inward to the pneuma which they contain ; this movement results in a further movement which the pneuma transmits through the blood to the centre, the heart. The pneuma is thus a sentient organism of a subtle nature spread through the body and acting as the universal medium of sensation. In later psychology this appears as a doctrine of " animal spirits."

CHAPTER XII

THE PSYCHOLOGY OF ARISTOTLE (III)

§ 1. The doctrine of the special senses explains the relation of man as a psychic being to the world around him: it shows how he comes into contact with that world; not merely as body may be in contact with body, the physical relation of objects; but as sentient comes into relation with sensible so that each partner in the relation realises itself in the unity of the relation. The unity of the senses themselves now calls for explanation.

The question of unity is naturally treated after discussion of the separate senses comprised in that unity. But there is no possibility of observing any one sense either in isolation from others or in abstraction from the unity which comprehends them all. Aristotle is therefore frequently somewhat obscure in his remarks, finding himself compelled to speak as though the individual senses had synthetic functions of their own. He repeatedly tells us that a single sense comprehends a class of objects. The class of sounds, for example, is the province of hearing, and includes all that is audible and the inaudible. The inclusion of these negative terms will be understood if we remember (*a*) that the sensation is the realisation of a stimulus; (*b*) that the stimuli actually realised fall between extremes not realisable; but these extremes themselves are not outside the class: if they ever were realised they would be realised in that class and no other.

The problem of a central sense arises from two con-

siderations: (*a*) the ear does not see, but the man who hears is also the man who sees; (*b*) each sense has a specific object, a quality of things; but some qualities are given in more than one sensation, e.g. roundness along with sensations of sight or touch.

From (*b*) arises another problem: a sense has discrimination only of differences in its own sphere, of red and green, e.g. in the sphere of colour. How, then, can we discriminate between sensations that belong to different spheres—between sight and sound, for example? Clearly we have here a new grade of unity. The world of objects, reviewed as objects of sense, divides into groups or classes: the particular sensations are unified in their genera; and again, each genus is a species of the higher genus, the all-embracing consciousness. The problem then is that of consciousness, in respect of (*a*) its function as unity of particular sense-mediated states of consciousness; (*b*) its reflexive function, or consciousness of being conscious.

(*a*) A consideration of our actual experiences shows us that perceptions are complex. My perception of an object which I see includes in addition to the specific object of sight (colour) other elements, such as figure. The sense-faculty is capable of only one determination at one time: I cannot see red and green at the same time or in the same act.[1] But I do see a "round red" thing in one indivisible act. The necessary conclusion is that two faculties are employed in this act: the particular sense functions along with a sense which is not particular in that acceptation of the term: it is "common"—that is, shared by all the senses. The proof of this is deductive: if the sense by which we perceive figure were identical with that by which we perceive colour, there would be two movements at the same time in the same recipient

[1] See note, p. 368.

organ, and they would modify or even neutralise each other. Conversely, if I had a sense for figure over and above all other senses, I should be capable of apprehending figure alone: experience contradicts this.

Aristotle is here dealing with psychological data which belong to the border region between external and internal activities, and must employ introspection to determine his theory; but he does not abandon his main category, which, throughout his psychology, is motion. Motion includes local motion or movement from place to place, and change or movement from one condition to another. In all sensation an objective stimulus is the cause of a change which proceeds through a medium into consciousness. Viewed as motion (*κίνησις*), change gives rise to problems, such as the question, How can that which is one undergo at one and the same time two distinct changes? But if this physical standpoint is abandoned the difficulties appear to vanish; quantitatively two separate motions cannot coexist, but must fuse; qualitatively, plurality and unity can coexist. In this conclusion, namely that coexisting determinations are possible in consciousness, Aristotle seems to have rested. He enumerates the "common sensibles" as motion, rest, magnitude, figure, number; he speaks of them as "accidental," though sometimes distinguishing them from the "accidental" perception implied in recognition; and leaves these statements without further examination from the point of view of consciousness. The exact difficulty which Aristotle here meets is shown in this ambiguous use of "accidental." In the perception that this is black and sweet, the element of sweetness is accidental in so far as it is not the specific object of sight; it supervenes in the perception from another source: similarly, the complex perception of "this object" may have, supervening upon it, elements not given as strict effects of the stimulus.

If I say " this white object is the son of Diares," I imply a perception to which I add a significance possible only because it is *my* perception—dependent, that is, upon knowledge which I have and others may not have. Here the perception that this is the son of Diares is " accidental " ; but at the same time it is immediate for me : it is a reaction to a stimulus, a perception made possible by my possession of that particular knowledge in the same way that perception of " the white " is made possible for me by my possession of that power of sensation. Upon this interesting topic Aristotle is not sufficiently explicit to make further statements possible. It is clear, however, that Aristotle saw exactly the significance of his own position. *All* sensation implies activity on the part of the sentient organ ; and perception implies activity of the percipient person. A highly complex sensation is not ultimately distinguishable from a complex perception ; and that again from an act of judgment. The only real point of distinction between the union of a particular sensation with a common sensible and the union of a particular sensation with an inferred fact is in the habits of the individual. No one has ever been in such a condition as not to unite figure with colour ; such union is not a product of experience ; but the perception of " this " as " the son of Diares " is a result of experience due to the nature of the percipient, though a " second nature." As we are talking of the mechanism of conscious life and really of motion, there is no objection from Aristotle's point of view to the idea of unconscious inference ; and such a latent (mechanical) unity is indistinguishable from the activity by which we apprehend common sensibles along with the special sensibles, though this is, of course, in no sense inference.

(*b*) The second point is summarily settled. If I do not perceive that I see, in one indivisible act, there will be

that which sees and that which perceives, and these will require a third faculty to unite them. To cut short this infinite process we assert that the sense perceives itself. As this applies to all the senses, the consciousness or self-knowledge which accompanies all specific sensation must be a function of the "common sense." This point Aristotle does not further develop.

§ 2. Having now crossed the line from outer to inner, from sensations of objects to consciousness; having, that is to say, explained the determination of inner motions or changes by outer stimuli, Aristotle proceeds to deal with inner motions as they persist after stimulation. He has all the time implied the existence of inner activity; the conscious being is always active, his passivity consisting only of determinations, changes in which he is passive in so far as he is not pure causality but shares in the causality. When the object is withdrawn, the activity expresses itself by re-stimulating the central sense and so reproducing the very effects, so far as form is concerned, which the sensible object produced. As the process of sensation actualises or gives form to the sense-faculty, an image is primarily the effect of the external stimulus, and regarded in abstraction from its source may be called an image or presentation. Representation, or the reproduction of the image in the absence of the original stimulus, is imagination. By virtue of these inner movements, which are psychic, man is able to store up and reproduce many images, and one image may be the cause of another, or more correctly one movement may set up a movement which previously occurred in some relation with it. The possibility of storing up the movement is the condition of Memory; it is that retention without which memory is impossible. The term Memory is restricted by Aristotle in

a manner peculiar to himself. It does not include mere retention: that is a condition, not a part, of memory. Memory is a condition in which an image present to the mind is known to be the copy of an object which had been present itself on some former occasion. In this way memory is an experience midway between mere passive retention and active recollection. The peculiar nature of memory is indicated in the formula, "all memory involves time." The further possibility of reviving an activity through its connexion with an existing activity is the condition of Recollection. Aristotle is not able to explain this, but he gives a description of the facts which is adequate and presupposes only the laws of habit. Organisms always tend to create habits, and the soul has its "habits" or sequences of ideas which follow each other in their order. The art of recollection consists in starting such a train of imagination. Recollection is the voluntary effort which by exciting an idea creates a stimulus for the whole chain of ideas. The laws of this process are the laws of association between psychic activities: the movement or change which we desire to initiate can be aroused by a present movement, which is either (*a*) like, i.e. identical with it, or (*b*) opposite, i.e. the negative counterpart, or (*c*) contiguous, i.e. part of a series which contains the object of search. Thus Aristotle formulates what have since been called Laws of Association, the laws of similarity, dissimilarity, and contiguity. Aristotle's own account is concerned with movements, psychic changes, thought of as analogous to physical movements, but differentiated by their power of self-origination. The phrase "association of ideas" conveys a different meaning.

§ 3. The "common sense" is the basis also for the phenomena of sleep and dreams. Sleep is caused by

fatigue, in which the "common sense" loses vitality; it may also be caused by food in the stomach, for in the process of digestion gases ascend to the brain and then, descending to the heart, cause the heat of the body to collect around the heart. Sleep, whether caused by fatigue or by the process of digestion, involves a cessation of the activity of the senses. Dreams, therefore, cannot be due to the senses: their images are, however, of the sensuous order, and therefore we may conclude that they depend upon the "common sense." Aristotle does not deny that dreams are more than mere imaginations; some elements of opinion are mingled in them, but the predominating characteristics unite dreams closely with imagination, whether normal or abnormal.

§ 4. Passing from this intermediate condition to the full light of wakefulness, we find Imagination is the basis of all thinking and a condition even of the highest rational activity. From the combination of many memories we attain our unitary experience. To understand this experience we must further analyse it, and, returning to the question of memory, consider the nature of our ordinary daily consciousness. Experience seems to be compounded of states of consciousness which are partly the immediate effects of present objects, partly revived impressions referred to past time, and partly anticipations. All of these must be, when actual, in the present; we are therefore compelled to explain the past (or future) character of a state which is itself present; in other words, we must explain the relations between memory, perception, and expectation. The difference of these states is a difference of time, not of actual time-relation but of time-quality. We are conscious in the case both of memory and expectation that there is a different time-reference. In the case of memory we can explain this: when we recognise a

picture as a picture of someone, we hold apart in our minds the present picture and the absent person ; similarly in memory we hold apart the present image and that of which it is an image. This is not a purposive act of intellect : it is a quality of the memory-image and possible in animals that have no intellect. This qualification is due to the co-operation of a time-sense with the faculty of imagination. Just as a memory of a particular sense-object, a white thing, can only be thought with the accompaniment of some figure, because the common sense functions in the representation, so any experience when revived is presented along with a sense of its time. This explains the time-reference in memory ; and Aristotle applies the theory to expectation, presumably because he thinks of events as forming a series, a conclusion which does not follow from this explanation of a time-sense. If I have a series, *a*, *b*, *c*, and my present experience resembles *b*, it should recall *a*, *b*, and *c* as all past ; whereas expectation implies that *c* is projected into a future. This certainly is a fact, but one that Aristotle can hardly be said to explain, if he implies it. The element of significance implied in such an activity carries us beyond the region of sense within which Aristotle undertakes to explain all the phenomena.

CHAPTER XIII

THE PSYCHOLOGY OF ARISTOTLE (IV)

§ 1. The attempt to exhibit Aristotle's doctrine as a continuous process of development from the lowest to the highest functions of the intellect, necessarily fails, at least in respect to the highest form of reason. As a rule, expositions of this doctrine are guided by the desire to make the course of development continuous and simple. Aristotle, on the contrary, seems to explain the human mind far more as composite throughout than as developing along one line. The inconsistencies which we find in the statement of the doctrine are to some extent at least modified, if we remember that from the first there is not one starting point, but two. The tradition of his ancestors leads naturally to a prejudice on the part of Aristotle, by which he is inclined to assume tacitly that the nature of man is dual. In the ethical sphere we have this expressly stated and made the reason for the limitation of man's ascent to the highest levels; in the sphere of knowledge we have a similar limitation implied in the fact that human thought requires images, that it is limited by the nature of the passive reason and is but a part of that eternal process which, we must suppose, is the life of thought taken by itself. In Plato the emphasis fell mainly on the higher forms of soul-activity, on its purposes and prospects rather than its actual life and limitations: in Aristotle, on the contrary, we find speculation on the life after death and even on the life of reason

itself much more limited; he concentrates his effort upon the broad basis on which the highest achievements of the human intellect must be built, and gives no more than a hint at the fulfilment or goal of life's activities. Consequently, the Platonic division between percept and concept, between lower and higher, seems to be shifted in Aristotle, so that the whole realm of rational activity can be placed on the one side and on the other nothing be left but the creative reason, of which little is said. Looking more closely, we find that actually the dividing line is far nearer the mean between the extremes of form and matter, i.e. pure reason and mere sensation. Aristotle has, in fact, constructed the scale of mental activities so that the two factors seem to merge, to a large extent, somewhere in the mean between these extremes. Starting from the lowest point of sense life, or from the lowest form of animal life, we can ascend as high as memory and imagination (taken as sensuous imagination), but here we find that our terms are reduplicated: memory is one thing, recollection is another: memory preserves the motor character of the sense life, but recollection is a rational activity, and may be called syllogistic: the difference between the two is, in fact, the difference between the highest form of the lower life and the lowest form of the higher life; in this way the extremes find a meeting point: the case is the same with imagination, for this also may be either sensuous or rational. It is clear that the work of the senses is the condition for the activities of reason: its products, consequently, form the material upon which reason must act, but this material is not something entirely foreign to its own nature: sensation itself is from the first a degree of rationality; it is potentially intelligible, and in its character as receiving form without matter it has furnished the first step for the actual work of reason. If we take desire, imagination, and memory

and consider the ways in which Aristotle refers to these, we shall see that they form, as it were, the central point at which the rational and the irrational are equally proportioned: from this centre if we think outward toward the senses, we shall find a continual decrease of rationality; if, on the other hand, our thought moves inward, we shall find a continuous decrease of the external, the material, or the purely sensible. The reason for this will be apparent at once if we recall the extent to which Aristotle's work is almost always purely analytic. In the case of sensation we attain its meaning by taking the constituent factors, namely, the object of sense and the faculty of sense; and considering these as expressing their actual nature in the act of sensation. In the case of intellectual activities we have a similar partition, and the fact of intelligence is only to be understood by considering the objects of intellect and the agent of intellect. Again, the terms potential and actual, or the terms matter and form, are simply analytic formulæ; any object of investigation can be treated in this way; if that object is the life of men it will be capable of analysis into matter and form (in this case into sense and reason); if, again, we limit ourselves to the narrower sphere of reason it, too, has matter and form, a lower and a higher reason. The process clearly would continue to infinity, and, in fact, must do so except for the postulate of pure form: the concept of pure form, like that of first cause, is therefore really a limiting concept: in the case of motion we arrive in the end at that which moves without being moved; in the case of desire we arrive at that which is desired for its own sake; in the case of thought we reach the thought that does not go beyond itself, that is at rest rather than active, and is form without being at the same time matter for some still higher form. In the explanation of what we must ultimately regard as an insoluble problem,

namely, Aristotle's view of creative thought, the most that can be done is to keep clearly in mind that it is the natural outcome of his method: very possibly Aristotle was aware that there is a certain degree of contradiction in treating as divisible, or as capable of analysis, that which is itself the presupposition of analysis. The consistent way in which the analogy between sensation and thought is maintained by Aristotle should be a cue to his general attitude; both these are, in their simplest forms, immediate and unitary: they are not capable of division or analysis. In the case of sensation the object belongs to the world of things, and consequently has an existence which enables us to speak of it as distinct from the sensitive organism; in the case of reason, the conditions are analogous but not identical; if, for example, the sense of hearing is destroyed, there still remains the external conditions for that which we call audible sound; but in the case of intellect, the intellectual act and its object are identical; there is no essence of the intelligible which is more than its intelligibility; in a very real sense the world of things intelligible depends upon intellect for being anything at all. In opposition to Plato, Aristotle divides the world of the intelligible into two distinct parts, of which one, the concept, is presented as the result of the process which began in sensation; while the other, the sphere of axiomatic truth, is simply the activity of the intellect in its own proper motion.

Before returning to a final statement of what Aristotle has to say on the subject of reason, we shall proceed to follow in the steps of the analytic method and consider the different degrees and functions of reason.

§ 2. The sphere of the sensuous faculties terminates at the imagination. A crucial test of the nature of imagination would be furnished if we could know whether all

animals possessed the faculty. As the animal is distinguished by the possession of sense without reason, it would follow that imagination depended on sense and not on reason. Our knowledge on that point being defective some uncertainty attaches to the description of imagination. It is sometimes associated with reason and will; sometimes it appears to be purely sensuous; sometimes it seems to be a kind of thought, at others no more than a decaying sense. Imagination can be clearly distinguished from both sense and thought: it is not sense, because we have the image when the sense is not acting (e.g. the image of an object no longer visible); it is not thought, because it involves no belief or reasoning. In brief, it is an intermediary faculty between sense and reason; as such it can be regarded from either point of view. If we take into consideration those functions of imagination which depend on voluntary activity we come at once to the act of thinking. The power of thought depends upon the power of retention; in the flux of sensations nothing would remain were it not that memory holds the universal element given in the particular sensation. Round this nucleus grows a cluster of memories; their differences excite comparison and discrimination, and reason begins its work. Henceforth it is reason that acts, but its action is directed to the images; without these images the discursive intellect never acts, and the voluntary manipulation of mental images is exactly what is meant by discursive reason.

For the psychologist the most interesting point is the character of the idea when it is present in the mind. The word idea suggests visual images just as phantasy suggests light, and it seems possible to have pictures presented to the mind in such a manner as to be entirely devoid of further significance. Such mental states might conceivably occur in reverie or in dreams. As a rule the image

is not in this way "pure fancy." The image is accompanied by some distinctively rational activity: it is discriminated from some other image, it is made the object of a more or less developed judgment, it is attended by a conviction. Thus parallel with imagination stand opinion, belief, and conviction. The common basis for all these is sensation; from the senses comes the image as a natural product, and the image thus produced is the object of a second process of discrimination. When the images are thus handled by the mind there results an opinion (*δόξα*) or a belief (*ὑπόληψις*); both these are mental states which combine the presentation of an image as representing an object with a definite attitude toward that object, a conviction with respect to it. Conviction being the work of reason it is clear that neither of these mental states is identical with pure imagination, for imagination as such does not involve reason. The decision of this point assumes considerable importance when previous theories are kept in mind. The relation of the image to the idea led the Pre-Socratic philosophers to blur the distinction between sensation and thought. Plato has paid little attention to imagination and left unanalysed the idea of appearance implied in the ambiguous phrases "it appears to be," "it seems to be" (*δοκεῖ, φαίνεται*). The clear distinction of imagination and opinion (*φαντασία, δόξα*) was consequently the creation of a scientific distinction and a scientific terminology in place of previous vagueness and popular language. For Plato imagination remained a kind of judgment; the distinction between sense and knowledge was consequently less accurately defined by Plato than by Aristotle. On this hangs the important question raised in the "Theætetus" and the whole problem of universal knowledge; for if there is no distinction between what seems and what is thought, between the psychological

image and the logical idea, the final victory must lie with the followers of Protagoras.[1]

Though opinion is not far removed from sensation it is distinguished by involving judgment. Here, then, we pass from the region of sense to the region of thought. So soon as the sense-given data are united by the mind's activity, thinking may be said to have begun. This is primarily reflection, carrying with it the inevitable discrimination. The sensuous images no longer arrive in the mind and remain either unconnected or joined by automatic processes of association; on the contrary, connexions are looked for and asserted or denied, relations are established by an activity due to reason.

§ 3. What, then, is the reason? It is clear that reason is something very different from sense: it is clear also that it is somehow higher and ranks above both sensation and the immediate results of sensation which seem to depend entirely on external stimulation. Reason is not the same thing as consciousness, for sensation is a form of consciousness; nor is it self-consciousness, for up to the present that idea has not been evolved. It is in its essential character the power of self-explanation; its beginning is found in the power of manipulating the products of sensation and giving an account of them: it goes beyond the mere consciousness of a given fact and adds to it a knowledge of causes. Reason belongs, of course, to the rational part of the soul; but if we divide the soul into rational and irrational "parts" it is difficult to say where sensation comes; for sensation is not irrational in the sense that nutrition is. The fact is that the division of rational and irrational implies a false standpoint. Aristotle does not make his distinctions with reference only to the human intellect; his basis is the entire scale of

[1] See p. 83.

Being from matter to form; and the point of particular interest is potentiality. Sensation is potentially reason because of its inherent power of discrimination and its tendency to extricate the universal from the particular. The same process of discrimination carries us on to still higher levels; sensation gives form without matter, and extricates from the multiplicity of sensations a preliminary universal; the forms thus precipitated by experience constitute a new plurality out of which a new unity can be evolved; and so the mind ascends to the highest generalisations. Beyond these are the axiomatic truths which do not come in this way from below, but are potentialities of the pure reason.

Within the region of sensation the effects are produced by external objects that come into relation with the senses. In the region of thought there is an active search for truth that implies some impelling force. It will be necessary first to explain the nature of this impulse; after that it will be possible to examine the doctrine of reason. For reason is with Aristotle, as with Plato, a light within: it guides the footsteps of man on the paths of daily life; it illumines the dark places of nature; in it is the birth of art, and it becomes at last divine and immortal.

The reason can be treated as sensation was treated: in both we have two correlated potentialities and an actuality. In the case of sensation there are the object, the sense-organ, and the actualised sensation. In the case of reason there are the object, potential reason, and actual reason. It is worthy of notice that the parallel is not exact: there is no organ of reason as there is an organ of sense; but the difference is slight because an organ of sense is properly such only when regarded as a potentiality of sensations. Another point of similarity between sensation and reason is due to the way in which the analysis is based on the objects. Reason is divisible

from the point of view of its objects; these are either capable or incapable of change, either contingent or necessary. Whatever criticism may be passed on this view and its metaphysical implications, it is psychologically true that the mind assumes a different attitude toward objects that admit outward action and those that seem to exclude it. Toward the former man adopts an attitude distinctive of the practical reason or thought that implies action; toward the latter he adopts the attitude of a spectator, his reason is theoretical. The reason that is concerned with things that can be altered comprises two spheres, that of conduct or practice in the narrower sense and that of production.

§ 4. The objects of theoretical reason are immovable; the practical reason is concerned with all that is capable of being affected by human action. In order to understand this activity it is necessary to study the nature of that impulse which resides in all living creatures. Regarded universally, this impulse is a tendency toward a better state; it thus appears as a metaphysical principle, a universal law of progress which all created things fulfil. While it is true in this sense that all creation strives after a final good, the actual objects of individual effort are only aspects of this good or elements in it. Moreover, there is no necessity for the creature to be conscious of the final good; it may fulfil the law without knowing it, and work the works of reason without definitely accounting for its actions in that way. When there is only sensation it is obvious that the end will be fulfilled instinctively rather than intentionally. In the case of natural appetites—hunger, thirst, and sexual passion—the good is sought instinctively and is realised through direct feelings. The creature strives only after food and drink: it fulfils through these the law of self-preservation. Thus there is

seen to be a transcendental principle imbedded in the various activities of animate beings; the rational creature is conscious of the principle as well as of the impulse, and so becomes the subject of voluntary as well as impulsive actions.

There is no essential difference between impulse and will regarded as sources of action. In both cases the essential factor is that general principle of activity which we may call conation. This conation or striving is always a reaching out after some object; when the object is given by the senses the act is one of desire; when the reason exerts control the act is voluntary. Man is so constituted as to stand between the animal and the divine natures; there are in him the desires of the beast united with a reason that is godlike: in the relation of these two are contained the problems of the psychology of conduct.

Conation acting in the irrational part of our nature depends on sensation for its direction. Sensations are always attended by pleasure or pain, and these again by Desire (ἐπιθυμία). As a generic term Desire includes all activities that either secure pleasure or avoid pain; it is the principle of action in relation to pleasures and pains.

Close to Desire Aristotle places Anger (θυμός). This is defended on psychological grounds: for desire and anger are both primary forms of conation and closely allied to sensation. The opposition between this and the Platonic view is intentional. The Platonic view is ethical; Aristotle is speaking in terms of psychology and physiology; he thinks therefore mainly of the two points in which desire and anger are akin. For they are both allied to sensation in that they depend on imagination as opposed to thought and are distinctively states of feeling.

Conation appears also in that part of the soul which conforms to reason. Here it appears as Wish, which is on the one hand akin to desire in being a form of striving

after an apparent or real good, and on the other hand distinct from either desire or anger in being amenable to reason. This dual nature of Wish becomes an important element in the analysis of character.

The general idea of movement imparted to the organism belongs equally to sensation and conation. The capacity for receiving sensations must precede the formation of sense-images (*φαντάσματα*), and the sense-images are the exciting causes in the case of all conation. Thus movement of some sort is a common factor in sensation as a form of knowing, in desire as a form of inner change, and in local motion as the external expression of desire. Sensation is a movement that proceeds through the body to the soul. In Plato it covered much more than the activity of the five senses : it was, moreover, distinctively an affection of the soul, a suffering rather than a doing on the part of the soul, passivity and not activity. The characteristic of a passive state is that one condition gives place to another as a result of movement set up from without. This interpretation explains how sensation and conation come together under the head of movement, they are changes in which one condition arises out of another (*ἀλλοίωσις*) ; as subject to such processes of becoming the soul is passive. The term passive, however, has in Greek the same ambiguity that attaches to the word " patient " or " passion " in English ; the word (*πάθος*) can also be used for conditions of disease and suffering. It was natural, therefore, to connect all the disturbances of the soul which appeared abnormal with the corresponding abnormal states of the body : in short, there are diseases of the mind as well as the body, and the emotions are in many cases abnormal states of the psychophysical organism. Following the slow transition of terms and evolution of ideas we see how the soundness of mind and the soundness of body naturally

came at first under the general idea of health; medical terms consequently proved useful in describing the pathology of the mind, and to some extent the associations of the terms guided the growth of ideas. The result is a diagnosis of psychic states with prescriptions for their treatment; we hear of this or that "diathesis" and even of the "kathartic" treatment of emotions.

§ 5. The sensitive, conative, and affective states of the soul are closely allied, and, as we have seen, come together under the general idea of changes that occur in the life of the soul. The distinguishing characteristic of sensation is its cognitive aspect; in conation the active element is conspicuous; while in emotions or affections the passive side is most in evidence. All sensation is connected with pleasure and pain; conation is directed toward the removal of pain or attainment of pleasure, and ultimately becomes the progressive movement toward higher perfection, whether regarded physically as higher vitality or ethically as rationalised conduct: the affections are the changes of the soul upon which pain and pleasure attend. These affections are enumerated by Aristotle as desire, anger, fear, courage, envy, joy, benevolence, hatred, and pity. The list is not intended to be exhaustive, and there is no attempt to make an exact classification of emotions. Desire has an emotional quality because it begins in the pain of want and ends in the pleasure of satisfaction. Anger, fear, and courage are types of feelings which are allied to Temper or the spirit of resistance; anger arises from the sense of wrong and seeks after revenge; fear is consciousness of danger with prospect of ultimate disaster; while courage is the consciousness of danger accompanied by assurance of successful resistance. The remainder come under the general head of Wish, and are attitudes of mind accompanied by imaginations of

good or evil whether for oneself or for others. As wish is concerned with good and evil, the presence of the images of good and evil (*φαντασία κακοῦ, ἀγαθοῦ*) in each of these states justifies their position under this head. As the passions belong to body and soul in union they may be described from both points of view either in respect of causes and motives or in respect of physical conditions and manifestations.

Movement may be analysed under four categories—place, quantity, quality, and form. As a change of form it covers generation and decay; as a change of quantity, increase and decrease; as change of quality such transitions as those of sensation; as change of place it is local motion. This last is the only motion which the soul directly imparts to the body. Motion in this wide sense of action is the basis of conduct, and it is important in view of ethical aims to determine the psychology of motion.

Motion in general requires three factors—that which moves, that which is moved, and that which acts as a fixed point upon which the moving force rests. All movement requires this motionless basis, else there is no stable element, nothing but a flux of movements passing from point to point. In the case of the universe the final good is that which moves but is not moved; and in the microcosm of the soul it is the good, real or apparent, that forms the basis of motion. To make motion definite and not infinite, progressive and real instead of endless and unreal, was part of the opposition of both Plato and Aristotle to the influence of Heraclitus. The metaphysic of motion does not concern us here except in so far as it forms the presupposition of the psychological treatment. That presupposition is simply the belief that motion always involves an end, and finally an end of ends. The creature moves toward an end which is given by the

sensuous imagination in the case of animals, and by that or by reason in the case of man. Here we return to conation (ὄρεξις), and explain exactly how the end (τὸ ὀρεκτόν) is reached. That which moves but is not moved, the point of rest or final cause of motion, is the idea or image in the soul; the appetite is the efficient cause of motion, being the resident activity which acts directly on the body; while that which is moved is the body. Thus whatever the starting point may be, the proximate cause of a movement is the conative element in the soul (ὄρεξις). Conation always depends on imagination (φαντασία), and the image may be either immediately due to sensation or due to a reasoning process ending in the selection of an image previously acquired. A difference arises within the sphere of motion according as we think of regulated or unregulated motion. At its lowest level conation is the immediate impulse to pursue or avoid. When this impulse is subjected to deliberation it is raised to the level of choice; for choice is rationalised impulse or conation based on rational deliberation. Thus a movement may be the outcome of two distinct processes according as the ultimate imagination which gives a picture of the end is the result of sense-processes or of reasoning. When sensation is the only factor we have action only; when reason intervenes action is co-ordinated and becomes conduct or practice.

Thus far the explanation of movement has been no more than a description of the processes which end in conscious action. The question of the origin of movement is still left; and this question is important because Plato has assigned movement to the soul as an innate property, while Aristotle declares that the soul is in itself unmoved. In answer to Plato, Aristotle elaborates the mechanical view of motion; the soul supplies only the final cause, the efficient cause is found elsewhere. There is in the body

a power of motion having its seat in the heart. As the seat of sensation is also in the heart, this forms, as it were, a junction for the psychic and the physical parts of motion. A change which on one side is a sensation is on the other a mechanical process of expansion or contraction; imagination belongs to the central sense and consequently to the heart, so that it also has the dual character and is both a psychic change and a physical movement. Sense and reason, in so far as they have this physical aspect, can excite and direct motion; but the speculative reason is excluded because it is concerned with immovable things that are not objects of our actions.

The consideration of actions that can be regulated and systematised introduces the problem of conduct and particularly that of will. The close union between imagination and movement leads to actions that follow immediately on the presentation of an idea. The formation of character is a process by which this impulsive action is checked and the power of rational choice developed. The will to act is, in its first or primitive form, a mere conation; conation is, in other words, the generic name, and will is a species of conation differentiated by the presence of deliberation. The perfect will is a conation completely rationalised; desire and wish and will are all harmonious in the complete character. This as an ethical ideal implies that the true good is the object of all. From the psychological standpoint the goodness or badness of the end is not of primary importance. The question which belongs to psychology is that of unity or co-ordination of impulses, not the question of the rightness of the intention. Here the important distinction is between greater and less degrees of control. The sphere of control is that of pains and pleasures, and control consists in the mastery over tendencies to excess. A man may lose control in the sense of forgetting himself and thus allowing

the feeling to obscure his consciousness of propriety: such are the cases of incontinence in laughter or anger or in pursuit of gain or honour. These cases have not the same importance as others, because they are not so distinctively immoral; psychologically they are identical in kind with more serious lapses. For Aristotle will is ultimately reason; the life of feeling is a lower existence to which man only descends when he fails to maintain the dignity of his rational nature; the ideal character is that of the man who never loses his head, never fails to act from reasons or be able to defend his actions as properly calculated and adapted. In all things there is a mean; even in the emotions there is a mean, and reason dictates it.

The transition from action to conduct (πρᾶξις) is effected by reason. It is obvious that conduct must always retain the element of activity through which alone intentions can be carried out. It is therefore to conation that we look for the motive power; the natural conation for the good is the basis of a good character. But as the good may be an apparent and not a real good, there must be added to the conation and its imagination a rational power which attains truth. Thus to goodness as a natural striving after one's own good is added wisdom, the power of being right in one's calculations.

Wisdom, in this sense of practical wisdom, is a rational activity and therefore rooted in judgment. The relation of thought to action is well explained in the phrase "affirmation and negation are to reason what pursuit and avoidance are to conation." These are not interchangeable because there may be affirmation without pursuit, negation without avoidance; both elements are required for good action, namely, the will to do right (ὀρθὴ ὄρεξις) and a correct or true judgment (ἀληθὴς λόγος). For this reason the psychological terms used for the moral

faculties must remain dual; moral choice, e.g., must be defined as a conation regulated by deliberation and the moral faculty as intellect fused with conation or conation fused with discursive reason.

The element called conation is common to all those states of the mind that have any connexion with movement. The practical reason or intelligence required for conduct is concerned with things capable of change: for these are in some cases in our power and can be objects of deliberation. The practical reason therefore includes conation; this we can now leave aside and consider the cognitive aspect separately. The understanding in general (*διάνοια*) has many aspects, such as science, wisdom, empirical skill, practical wisdom, tact, and shrewdness. These popular terms can be reduced to two, wisdom (*σοφία*) and practical sense (*φρόνησις*); and finally the latter appears as subservient to the former, leaving wisdom supreme. The point of contact between these and the lower functions of intellect is found in conception (*ὑπόληψις*); for science is a right conception of universals in the sphere of the necessary, practical sense the right conception of the ends of action. The important point here is the correctness of the ideas; opinion is judgment but not necessarily right judgment; opinion and conception are much the same thing, but under some conditions the reason forms its conceptions with infallible accuracy; we then have those states of mind that attain ultimate truth. The explanation of this ultimate character of some conceptions is found in the simplicity of the objects apprehended; no process of judgment as a connexion of ideas is then required; mediate thought passes into immediacy and the mind is in direct touch with its objects. This ultimate state is therefore an apprehension analogous to sense perception. It will be necessary to remember continually that for Aristotle the scale of knowledge

has two limits: the lower limit is the immediate sense datum containing an implicit universal; the higher limit is the explicit universal upon which the mind lays its finger.

The characteristics of practical sense are to be discovered by studying the character of those who are wise in the matters of conduct. The essential is a correct apprehension of the universal in each case combined with a power of deliberation. Action is concerned with particulars, for a man must do a particular thing; no one is ever said to "do" a universal. At the same time the truth belongs to the universal; there is in all conation a latent universal; as the individual creatures strive after particular good things they strive after final good which is the form of all actions; reason enters in as a power of bringing to consciousness this latent universal. The problem of the practical man is to keep together the given particular case of action and the universal to which it must belong. The nature of this connexion between universal and particular can be seen more easily when the movement is possible in either direction, e.g. in the solution of mathematical problems when the general law is stated and the figure can be constructed. Here the mind works from a conclusion to a necessary starting-point; the construction of the figure really begins where the hypothetical process ends. In practice there is a similar process. He who deliberates says *if* the end is to be attained this course must be pursued; in other words, he works out the possible means to the end. Reason affirms the end, saying this should be done; conation furnishes the active desire to do it. The man whom we call practically wise is therefore one who grasps the end rightly, deliberates on the means correctly, and has the inclination to achieve the end. Here we have end of action, means, and motive power held together in one unity. This is the ideal which is, unfortunately, rarely attained.

It is obvious now that practical wisdom is an extremely concrete affair. The good man is not one who knows the right, but also one who acts on right principles. His character involves a definite kind of Wish which is really a certain kind of conation, a definite bent of character. The reason does not move and it cannot directly produce movement; teaching will not avail in this sphere unless there is also training. Goodness is a product which depends largely on habit, for it is only through habit that the tendency to movement can be directed into the required channels. There is such a thing as natural goodness; the creature may have a natural tendency in the right direction; but if this is to become stable it must be continuous and conscious. The continuity is secured by habit; for as time goes on the original power of movement in any direction becomes limited; plasticity decreases; instincts are inhibited, and those that have to be selected for cultivation pass from potentialities to fixed states. When this is achieved natural goodness has become moral goodness; nature has become second nature, and morality has penetrated to the innermost fibre of man.

§ 6. The type is not always realised, and the study of man must include the varieties that arise from failure. The reasons for failure are to be found in natural defects. Individuals may start life maimed in respect of virtue; there may be some essential flaw in a man's make-up, or disease may cause abnormal states. Aristotle's grasp of biological principles was sufficient to make him alive to moral deformity as a natural phenomenon: wickedness is not always viciousness; it is frequently a congenital defect of will power. Where there is viciousness pure and simple the condition approximates to that of the animal whose desires have no controlling reason. It is an exaggeration to call a man a beast, but as a descrip-

tive term the word indicates a truth; desire may be so perverse as to be inhuman. Bestiality is a phenomenon that belongs to the sphere of natural science, and is to be explained either as a failure of nature to produce the normal type or as a decline from the normal state due to such accidental causes as disease. The psychology of the normal self must be confined to normal types which include certain degrees of perfection. The perfect type involves a harmony of desire, wish, and will; variations arise when this harmony is not realised and the consciousness of the right coexists with tendencies in other directions. Morality is concerned with pains and pleasures and vice is tendency to excess: a man may avoid pain too much or seek pleasure too much, while it is his duty to pursue the mean in each case. Assuming that he knows and, in a sense, wills the good, what conditions cause failure? The answer is an analysis of will showing that in some cases desire rises into action before the process of deliberation is complete. A modern psychologist would call this an explosive will. In other cases the process of deliberation is initiated by the strength of desire. The result is then a kind of self-sophistication; the individual reasons to a conclusion which he wants; the process as such is logically correct, but the wish is father to the thought, the slave rules the master, and the whole process is an unconscious parody of deliberation. This explanation of moral failure is made more interesting by the fact that it opposes the Platonic tradition according to which vice is ignorance. Aristotle saw that it was possible to have a right conception and yet fail in action; for the principle of action is not identical with the principle of reason: man is not a creature ruled by knowledge, he may have reason and yet not be wholly rational, he may lose his reason and regain it as he may be drunk and become sober, sleep and wake again. The physiological parallel is not a mere analogy;

the power of clear reasoning is not always at the same degree of intensity. The drunkard ceases to realise vividly the meaning of the precept he can quote, and in a similar way the passions can reduce a man's realisation of principle. It is not only the young that suffer excess of emotion or become intoxicated with the wine of life. There is a connexion between delirium, insanity, the torpor of great suffering, immoderate anger and overpowering lust which did not escape Aristotle, and to these observations he owed his insight into what is literally moral pathology.

§ 7. The basis for Aristotle's division of intellectual functions is the character of the objects. These objects fall into two main classes, the changeless and the changeable: to which correspond theoretical and practical reason. The psychology of practice has been discussed and the minor topics present nothing of interest which is distinctively psychological. We pass now to the question of speculative reason. In the case of practical wisdom it was seen that the function of reason was to make explicit the universal latent in conation. Here we return again to the basis of sensation and follow the process by which the universal latent in sensation is made explicit for consciousness. The sense-processes leave in the mind certain forms, and imagination is the faculty of presenting the images which memory retains. Thus the mind becomes filled with forms and may be called the place of forms; when it is active it calls up by recollection the forms it requires and engages in active search for ideas connected with those present to it. The field of consciousness does not include all possible ideas; some only are present to the mind (*θεωρεῖ*) out of those which, in the wider sense, it possesses (*ἔχει*). Thinking is therefore the actuality of ideas which otherwise exist potentially.

Among the potential ideas are some that do not owe their origin to sensation; these are the first principles of knowledge. As in the case of practical so in theoretical knowledge a union is required between the particular and the universal, between the sense data and those highest principles which the mind knows intuitively. The connexion is established by induction. The universals which constitute experience are produced as the automatic result of perception. From these first universals others may be evolved by comparison and abstraction and the wider generalisations of the sciences are reached in this way. The object of the mind is to reduce the world as far as possible to unity; a search for causes is the intermediary step, and induction is the process by which causes are learned.

The reason (νοῦς) is a fact of which there is no explanation; it comes from without in the sense that its cause cannot be indicated, perhaps because it is itself that which knows causes; it has its own objects, and by these we define it. The general principles which have guided us so far continue to be of use. Just as sensation is the actualisation of two potential realities, that which can feel and that which can be felt, so the intellect is the realisation of that which is able to understand and that which can be understood. In intellection as in sensation the two terms into which we can analyse the relation are, for our knowledge, mere abstractions. This fact is somewhat obscured in the case of objects of sensation; they appear to belong to an independent world because they have relations one with another: there is, for example, a relation of contact between bodies neither of which is called sensitive; but in the case of the objects of intellect we have no knowledge of them which indicates their Being as different from their being understood; their *esse* is *intelligi*. In this region of ultimate truth there

can be no error; reason is infallible because in it alone truth has being; reason, as it were, lays its finger on its object and has an immediate knowledge just as we have immediate perception in sense. The difference between the relation which sense has to its objects and that which reason has to its objects is expressed by Aristotle in the statement that reason is not a mean between extremes; it does not deal with a foreign matter in which it realises a mean; there is no defect or excess which falls outside its scope and makes for it a limit.

Taken as a whole, reason is divisible into form and matter. The matter is here, as always, passive in relation to the form; it is an aggregate capable of undergoing a change into a formed condition, for the term passive means ultimately capable of being raised to a higher level of organisation. No matter is without form, because all perceptible matter has form in so far as it is perceived; but "form" is a word with a significance that changes according to the context; the marble is matter in relation to the statue; the feelings are matter in relation to the life of reasonable conduct; and the chaos of perceptions is matter in relation to the intellect. The characteristic of the highest state of a rational being is the complete unification of his life. This he may achieve either in respect of ideas or in respect of actions. Intellectual development is a process from chaos to unity, but it is a process with well-defined steps. First comes the sensation which is itself a unity of differences, for under one sense, e.g. sight, come all the differences in the scale of colour; then comes the synthesis of sensations effected by the Common Sense; next comes the stage of Belief, which asserts a connexion between experiences as a matter of experience; then the Understanding strengthens and establishes this belief, being the discursive reason. Thus a natural course of progressive unification lays the world of

experience before the eye of the mind as a whole; man can see it all; there remains only the necessity of seeing into it, of looking through experience to the eternal truths of which it is the exponent. In all the intermediate processes there has been possibility of error; every partial act of unification is an opinion which we cannot refuse to form, an affirmation or negation which must be made and may be right or wrong. But at the last there is only pure truth; this is the mystery of the "pure soul," the unmixed intellect which is a faculty of universals and knows those truths which experience neither creates nor destroys.

The speculative knowledge in which all knowing culminates is essentially of universals. Aristotle provides a psychological basis for these universals in the first stages; they do not emerge from nothing, neither are they general statements spread out over a multitude of facts. On the contrary, all perception is of the universal; any given object is perceived as being of a certain sort: perception is therefore particular only in so far as it involves the activity of the sense-organ, which again involves the common-sense and therewith the time and space sensations. Consequently, if we consider our knowledge of any given object from the point of view of its genesis, and remember that all our human thinking is conducted under conditions that involve the Imagination, we see that it is a complex of form and time and space. Any knowledge, Aristotle seems to say, is always a recognition of form, that being the representative of the thing; and in actual experience the time and the place are fused with this recognition of form in the concrete act of knowing. But the forms can be themselves organised in a higher unity; for the mind is an object to itself, thought being reflective. Consequently, though experience obviously gives us no chance of verifying the statement, it is *logically*

conceivable that mind should ultimately be separate in existence; for its content, the forms, have independent universal reality, and they involve the activity which sustains them in actuality.

On the question of the active intellect, Aristotle's statements furnish an insoluble problem. From the historical point of view they are of primary importance, and our accounts of subsequent theories will best show their significance. It will be sufficient here to state exactly what Aristotle says.

Aristotle carries the distinction of activity and passivity through to the last. As there cannot be an infinite series of degrees it is natural and logical on the part of Aristotle to end with a Reason which is active and not passive, a culmination which Aristotle seems to have reached naturally and left as the point which thought reaches at last and beyond which thought cannot go. To others it has seemed a beginning rather than an end. Human curiosity is not content to see the barrier; it must needs look over it and if possible get over it to see what is beyond, firmly believing that there is something beyond. The idea of transcending experience haunts the human mind. Aristotle hinted at further problems, but he did no more than state them, while his successors have tried to solve them. This active intellect has formed a centre of speculations which trail through the centuries; an account of them would form too large a digression for this essay, and prove in the end irrelevant because Aristotle certainly meant little or nothing of what these later teachers found in his words. The cardinal passage is in Aristotle's treatise on the soul, and runs as follows: "But since, as in the whole of nature, to something which serves as matter for each kind (and this is potentially all the members of the kind) there corresponds something else which is the cause or agent because it makes them all, the two

being related to one another as art to its material, of necessity these differences must be found in the soul. And to the one intellect which answers to this description because it becomes all things, corresponds the other because it makes all things, like a sort of definite quality such as light. For in a manner light, too, converts colours which are potential into actual colours. And it is this intellect which is separable and impassive and unmixed, being in its essential nature an activity. For that which acts is always superior to that which is acted upon, the cause or principle to the matter. Now actual knowledge is identical with the thing known, but potential knowledge is prior in time in the individual: and yet not universally prior in time. But this intellect has no intermittence in its thought. It is, however, only when separated in time that it is its true self, and this, its essential nature, alone is immortal and eternal. But we do not remember because this is impassive, while the intellect which can be affected is perishable and without this does not think at all."

The best interpretation of Aristotle's general position is that given by Rohde, who distinguishes sharply between the physical or naturalistic element in Aristotle's work and the speculative parts which to a large extent were simply the survival of traditions. This point of view seems amply justified, though it is necessary to remember that Aristotle may have retained the traditional doctrines on the basis of quite independent convictions. As a man of science Aristotle deals with the phenomena of life as they are given us in our own consciousness and in the actions of others. But there is in Aristotle an element of mysticism, a vein of speculation more often seen in Plato. Behind the phenomena of mind he thinks there must be an agent, a power that thinks always, a thinking essence that comes into man from without and dwells in man. The dualism of Plato is to a great extent either

rejected or refined away by Aristotle. Face to face with the greatest mystery of the soul he finds no new solution, but perpetuates in altered form the transcendental theory already taken by Plato from Orphism.

This explanation of Aristotle's historical affinities seems credible. While Aristotle's idea of God is not that of "theology" in the modern sense of the term, he continually asserts that this active reason is "divine," "godlike," a thing that is unmixed and free from all affections, so that what he says of God he also says of the soul. His successors found his position unsatisfactory; the naturalism which treats reason as a function of the organism found support in some aspects of the master's teaching; others developed the latent possibilities of mystical dogmas. The only decisive point in Aristotle is the statement that the pure reason comes from without. That makes clear the belief of Aristotle that the soul is not a product of experience, not a mere outgrowth of sensations or a name for sensations and thoughts taken as a whole. If it does not arise in man as a product of organic life and does come from without, can it exist before or after this life? That was the problem which Aristotle did not solve; the very contradictions of his interpreters show that the text gives no final answer. It is possible to believe that a power of thought remains indestructibly the same under all conditions and yet maintain that it is only known under some conditions. In that case the agent is only known concretely, that is to say when united with the passive element; it may be conceivable and definable in abstraction, but not knowable in the full sense of the term. It is possible to frame a statement of what the active element would be if it existed out of its present relations, but not to assert that it actually does so exist. If the soul is likened to a sailor who guides and controls the boat while he is in it, we can

ask what happens when the sailor steps out of the boat: but not every question can be answered. In brief, Aristotle's position on the question is really agnostic: as the history of psychology proceeds it will be evident that what is said on a future state is based on revelation; if we see in Aristotle a cautious mind knowing nothing of revelation, a Greek with all the clearness of thought and all the consciousness of mystery which characterised the best age of Greek thought, we shall understand his position.

CHAPTER XIV

TENDENCIES IN PSYCHOLOGICAL THEORY AFTER ARISTOTLE

§ 1. After Aristotle the Peripatetic doctrines began to change almost at once. The main body of doctrine naturally remained and formed the basis for all variations, but many points were obscure, and some of these presented very difficult problems. Before all others comes the question of the soul's activity, and a steady trend toward naturalism becomes evident from the first.

Theophrastus, the successor of Aristotle, finds difficulty in accepting the doctrine that the soul has no movement, except accidental movement. Thought appears to him to be a movement of the soul. Closely connected with this is his criticism of the meaning of potentiality and actuality. The transition from a potential to an actual state must be a movement and a movement of the soul. Again, if the idea of potentiality is criticised it will appear that potential reason is really no reason at all, and reason will cease to be possible. For Theophrastus these are difficulties to be discussed; they do not appear to him to necessitate a rejection of Aristotle's doctrines, but they none the less lead to considerable modifications. In the first place, they suggest that the division of reason as passive and active is not ultimately tenable. Secondly, the logical course to adopt seems to be a recognition of reason as a unity having different degrees or manifestations. If this line

is followed the a priori assertion of different kinds of reason will be rejected and human reason will appear as the highest development of powers found both in the lower soul of man and in the animals. In Theophrastus there is a foreshadowing of this change of doctrine. He probably regarded the lower elements of the soul as identical in man and the animals; he also saw that Aristotle's treatment of the imagination was a compromise, and sooner or later it would be necessary to say whether this was or was not a function of reason. The real source of all these difficulties is the way in which as yet sensation and the products of sensation (the sensuous images) are left outside the range of rational activity: the solution could only come through a recognition of thought-elements in sensation itself. The trend of subsequent doctrines is naturally toward a theory of reason which will bring it into closer contact with sensation and treat it on more exclusively empirical lines.

The Peripatetic school derived from Aristotle an inclination to scientific inquiry. This reacted on the more speculative parts of philosophy and produced a strain of naturalism which becomes gradually more conspicuous. Theophrastus studied botany and zoology in a comprehensive and methodical way. Plants are living creatures with a principle of life contained in their heat and moisture. Animals form a higher stage of existence: their life is also dependent on internal heat, but is more definitely a unity of functions, and they may be said to have a soul. From what is known of his researches it is clear that Theophrastus was in a position to see that the scale of nature was nowhere definitely broken: if he still holds to Aristotle's dualism and regards human reason as something more than the highest stage of animal evolution, this position is not free from doubts. The admission of movement as belonging to the soul removes the main obstacle, and

opens the way for the naturalistic theory. As the scientific interest grows the " pure reason " ceases to attract attention ; problems arise which seem insoluble, and in place of the idea that reason is an unlimited capacity there arises the belief that the eye of the soul may be dazzled by excess of light. On every side speculative inquiry was giving way to less ambitious efforts and lapsing in favour of empirical generalisations.

§ 2. Eudemus appears to have checked for a time this tendency toward the sciences. The theological side of the Peripatetic tradition was again made prominent and reason was more closely allied to God. Eudemus took a view of natural goodness which involved a position almost pantheistic ; for he distinctly regards reason as an innate power by which men attain their true and proper end ; thus identifying nature and reason in some cases at least. Reason, on this view, is primarily a transcendent power that works out its own ends : man shares in it, and it is the divine element in our nature, the God in us.

§ 3. The source of this view in Aristotle's work is sufficiently obvious, and Eudemus is more strictly Peripatetic than those who inclined to naturalism. He stands for a development diametrically opposed to such extremists as Aristoxenus and Dicæarchus. Eudemus was certainly inclined to Platonism : Aristoxenus boldly accepts the belief that the soul is only a harmony of the body and denies its self-subsistence. This theory is the imprudent extension of musical theories into psychology : it is not Pythagoreanism, but rather a groundless use of analogy. Dicæarchus, the friend of Aristoxenus, maintained a similar view, saying that the soul was a mixture of material elements in a harmonious union. Both doctrines, obviously interpretations of the same facts, are to be traced to the

medical doctrine of the correct mixture of elements as a basis for health. To say that the health of the individual depends on a harmony of elements is natural and reasonable; to say that the soul is a harmony is really to say nothing. There seems to be in these two theorists a mixture of Pythagorean notions, Peripatetic ideas of form, and medical views. Some precedent was to be found in the importance given by Theophrastus to music. The "Kathartic" character of music was explained on the basis of motion; the exact meaning of this is hard to see, but it obviously implies that the movement which constitutes harmony in sounds is capable of producing a similar movement in the soul. As physical diseases were said to be curable by music, harmony and disease were necessarily opposed. An enthusiast need not go further for clear evidence that harmonious movement of the physical organism is life, the very principle of life, and therefore is the soul.

§ 4. More important than this eccentric movement was the work of Strato. This famous Peripatetic represents the culmination of the naturalistic development begun by Theophrastus. The link is seen in Strato's view of motion: activities of the soul are motions, and motions are inseparable from matter. Hence there is no more talk about the immaterial soul, the separable reason, or pure thought. The object of science is the corporate soul, the united soul and body. Strato confines himself to this unitary object and makes an important contribution to psychology by properly regarding this unity. The soul he regards as a single force diffused through the body: it is distributed in the sense-organs as the air in the flute; reason is the activity of the central soul which is situated in the forepart of the brain between the eyebrows. In this view there are clear traces of Stoic and medical

influences; the soul is a pneuma controlled by the will and its diffusion through the body is taken from the doctrine of the nerves. The real importance of Strato lies in his treatment of mental activity. The old division of sensation from thought is at last destroyed, and attention is recognised as the indispensable condition for converting impressions into perceptions. Some activity of thought accompanies all those relations with the outer world which we know as such. Strato still holds a theory of "coming into consciousness," as if anything could make its way into consciousness; his grasp of the idea is therefore imperfect, but he has succeeded in making consciousness a unity, and definitely recognising that impressions may occur without coming into consciousness if the mind is occupied in some other direction. Attention for Strato probably meant a direction of the spirits to the organ of sense. He did not consider that the actual sensation arose in the organ but in the soul. The belief that the sensation is out of the soul (e.g. in the finger) is simply a kind of projection. In this way we see that all sensations are apprehended by the soul and also thought over; there is no real distinction between reason and sensation; consciousness is the term which best denotes the rationality common to all functions of the soul. In this the animals share: they and we alike have only a reason which has grown up with the body; there is no immortality, no connate endowment of eternal truths, no reminiscence, and no pure activity of reason.

CHAPTER XV

THE STOIC THEORY OF MAN

§ 1. THE history of psychology reached a significant climax in the work of Aristotle. In spite of the numerous differences Aristotle is closely connected with the Socratic and pre-Socratic traditions; in spite of a strong vein of empiricism and a regard for the natural sciences there is still left in Aristotle the speculative temper that verges on mysticism. To the last Aristotle is definitely one of the old school; but so complete was the work produced by this combination of speculative and empirical tendencies, that none of the later schools failed to find in it the starting point of their theories.

The characteristic of the Stoic and Epicurean theories is the humanism of their interests. The change which comes over philosophy at this stage is produced solely by a change of interest; there are no new discoveries to subvert old theories; science contributed no fresh facts to undermine previous constructions; the times were retrograde rather than progressive. Only in the sphere of politics was there revolution and novelty producing a new atmosphere and a new environment. The vitality of the new thought was due to its origin; the struggle for existence under new conditions is the perennial source of great achievements, and the age of the Stoics and Epicureans was marked throughout by this character of strife. The actual outward form of this struggle, whether in the ebb of Alexander's conquest or the fresh tide of

Roman imperialism, need not be described here; philosophy was the consolation of the spirit and the product of the deeper inward movement of reflection. When we look at the outward form of these systems it is most of all necessary to remember that they are like the temples wrought by hands: they are symbols of the creeds by which men lived; they are antiquated, unfinished, and strangely patched; but for those who will believe in order to understand they have something akin to the sanctity of religions nourished by the blood of martyrs.

The creed of the Stoic or Epicurean differs from the Platonic and Aristotelian in tone and character. It is misleading to say that the difference lies in the practical character of these later doctrines. Plato was essentially practical, and Aristotle recognised equally well that all sciences are instruments of the good life. Yet the Stoic and Epicurean are in a sense more practical: they have a more vivid interest in human needs, and this vividness is due finally to the prominence given to feelings. Stoics and Epicureans alike are absorbed in the problems of the life of feeling: they acknowledge openly that man's whole being is concentrated in his passions, and their thought centres upon this fact, whether they preach restraint or justify indulgence. This is the new focus, the humanism of the new era. The interest which Stoic and Epicurean roused and maintained was due to this subtle innovation by which man's thoughts were turned again from the heavens to the earth, from the gods to themselves.

This view of the two schools explains the relation of the different parts of their systems. Technically the parts are distinguished as logic, physics, and ethics. Psychology enters into all three; physics tells us the nature of man; logic describes his powers of knowing and thinking; ethics includes his conduct. It will be necessary, therefore,

to divide the treatment of psychology under these heads, though it will soon be apparent that the ethical part is really the most important and dictates to a large extent the character of the other parts.

§ 2. The influence of Aristotle is obvious through all the succeeding schools. The Stoics took Aristotle's work as a basis and treated it to a somewhat drastic simplification. They reduced the categories to four; they cut down the four causes to two; the idea of development they reduced to a somewhat premature monism. In spite of their allegiance to Heraclitus the Stoics are never so far retrograde as to attempt to ignore Aristotle's work; the pre-Socratic elements which can be traced back to Heraclitus, no less than the Cynic elements, appear in Stoicism transformed by the influence of Aristotle. Above all, it was from Aristotle that they derived their method which combines analysis with development.

Turning first to the universe as an object of thought, we find the Stoics employ two categories or heads of classification, namely, action and passion. The world of things is consequently divisible into those that exert and those that submit to action. This classification does not imply any ultimate difference of nature; all things are real in so far as they are capable of acting or being acted upon; all things are therefore material, for this is the definition of matter. As the Stoic defines matter in terms of action there is no "dead matter" and no opposition between matter and spirit. A pure monism results, apparent differences in the universe being ultimately differences of degree. The substance which is ultimately the Universe is called Fire, after the manner of Heraclitus. As cosmic it is the soul of the Universe, the all-pervading principle of activity; as regulative of all change it is the inherent law of the universe, its reason. The

element in all things which gives form is of the nature of Fire and has different degrees in the different levels of being: in the inorganic it is a mere principle of cohesion (ἕξις), in plants it is a specific principle of growth (φύσις), in animals it is the higher principle of life (ψυχή), which is irrational or rational. Thus we have an ascending scale of existences forming a scheme of the universe based on the idea of development. The higher includes the lower in the way already taught by Aristotle.

From this scheme of the Universe it is obvious that the psychology of the Stoics is a natural history of reason. The active principle in all animate creatures is called "soul," and is the subtlest form of substance: it pervades the whole organism of the creature just as Reason pervades the universe. Thus the ancient analogy of macrocosm and microcosm is restored; with it is associated the idea of a participation in universal reason which leads to a theory of unconscious reason manifested in instincts. Mental activity as it is found in men is a developed and specialised form of the universal reason. Reason, as such, is to be regarded as a principle which is independent in its existence and activity. The creature who possesses reason is therefore only its vehicle, and is perhaps more correctly described as possessed by reason. From the physical point of view nature is filled with an active principle which moves by its own laws and fulfils its own ends. The first deduction from this premise is that nature and reason are synonymous; all the activities of uncorrupted nature must be rational in the primary and universal sense of rational; the animal will therefore be in many respects better than man, for the native tendency will often be more correct than the purposes of a sophisticated mind.

§ 3. The idea of correctness leads to that of moral distinctions. Before discussing the question of conduct it will be necessary to complete the statement of parts and faculties of the soul. Here we deal only with man; animal psychology figures largely in Stoic writing, but not as a product of scientific investigation: it is employed to cover a number of suppositions which are deductions from the belief in universal reason and serve to give a concrete character to statements about the natural life and the primary objects of universal reason.

For the Stoic the real is always substance. The soul of man is the most subtle form of that substance which is the stuff of the universe. The proof of this rests on the assertion that the power to act or be acted upon is the criterion of reality and also the essential attribute of matter. The Stoic therefore abolishes a spiritual world if by spiritual is meant that which falls outside the range of natural laws. Psychic phenomena are, accordingly, reduced to physical facts. The arguments brought forward to prove this position are not conclusive. The corporeal, they said, cannot be affected by anything that is not corporeal; the body is affected by the soul, and soul is therefore corporeal; mental characteristics are inherited no less than physical qualities, and must therefore be corporeal; for likeness and unlikeness cannot be predicated of anything that does not impress the beholder in a certain way and to convey impressions is to be active and material. In those arguments there are all the difficulties and defects which corrupt modern materialism: we may compare, for example, the way in which modern writers appeal to the conservation of energy as a proof that physical cannot be converted into psychic or psychic into physical movement, while the opponent replies that "conservation of energy" is a formula that remains unaffected by a distinction of kind between psychic and

physical energy. The fact is, that the Stoic was bent on maintaining a monism; terms are flexible and express little more than a point of view; the terms of the Stoic formulæ were ultimately ways of stating the unity of the world and do not require further criticism. The main contentions, namely, that distinctions (such as soul and body) are not ultimately differences and that a living unity is necessarily a system of interactions, were valuable contributions to a scientific grasp of the world.

The ideas of unity and action arise naturally from a consideration of human life. The Stoic adopts these from previous writers, and shows no originality of treatment. The soul is a coherent material substance extended through the body. It can be described in any terms that satisfy the necessity of combining heat, mobility, and degrees of rarefaction. Heat is obviously a characteristic of the living creature; mobility is equally evident; while differences of character can be expressed in terms of finer or denser conditions of the soul-matter. The physical foundation of Stoic psychology is therefore the doctrine of spirits (*spiritus*, πνεύματα) already taught by more than one predecessor. This doctrine was gradually becoming more detailed; the details tended also to differ in different writers. Primarily the pneuma is the breath of life: it is a warm air closely associated with the blood; it is a vital principle transmitted in generation; it may be rarer or denser, and may be collected especially in one region of the body. The term pneuma is consequently used variably, being at one time equal to soul and at another time including more than is meant by soul (ψυχή). The Stoics persistently combined two lines of thought with no clear explanation of their relation. Taking man as an animal they described the soul as "spirit," a diffused air connected with the blood. This suffices for the vegetative functions; but a further stage is reached when, after

birth, the creature breathes the air, while the last stage, the attainment of true rationality, is postponed until the fourteenth year. This attempt to describe the evolution of the individual soul is not intelligible. The evolutionary character of the doctrine, which makes the individual proceed through the stage of plant-life into animal life, is interesting but undeveloped: the nature of the transition from the irrational to the rational condition remains obscure.

If the reader closes his eyes to these unfortunate gaps, it is possible to construct a general statement of the Stoic position. The soul is a fine material substance contained in the body and forming its bond of unity: it is liable to depletion and is nourished by vapours from the blood; it is one in nature with the external fire (or warm air) which pervades the Universe; and can therefore be described as a fragment of the Divine Fire or World Soul. Two physical dogmas are employed to support this theory. First, that of the "mixture," which explains the possibility of each part of the body being penetrated by the soul; secondly, that of tension (τόνος), according to which differences of various substances are explained as degrees of contraction, the same quantity of a given substance being capable of greater or less contraction without loss of coherence and unity. Difference of tension in the one original substance explains the difference of body from soul, and the soul itself may have differences of degree; the finest pneuma is in the left ventricle according to Chrysippus.

The majority of the Stoics refer to the breast as the seat of the soul; the main argument for this being the belief that the throat, the pathway of the Logos, comes up from the heart. As the soul is the bond of unity in man it has no parts, but it goes forth from its central position and its activity varies according to the differ-

ences of the organs employed. There are eight classes of activity, namely, the activities of the five senses, speech, generation, and reason. Of these the reason (τὸ ἡγεμονικόν) is considered supreme; its seat is the heart, and from this central fount run the different streams of the other senses; the multiplicity and unity thus coexist, for the mind is one and it is one breath that lives in these different organs. The Stoics grasped this idea of unity from both the physical and psychic sides: the mind is not only one as one substance, but also as self-consciousness, a central ego.

§ 4. From the nature and substance of the mind we pass to its activities. The soul has inherent activity and the Stoic lays stress on this aspect of mental life. The two main divisions of mental activity are those of knowing and feeling. In the former, knowing, there is a relation to the outer world and the soul begins with a power of action but with no actual endowment of knowledge. This is expressed in the statement that the soul is, at first, like a blank sheet of paper; the senses write upon it the elements of knowledge. The doctrine appears to have been stated at first without any qualification. Zeno speaks of impressions made upon the mind: Cleanthes defined the process as analogous to the impression produced by the seal on wax. Chrysippus revised this doctrine and declared that the result of sensation was not an impression but a modification of the mind. This was an important step, since it involved giving up the notion of an impression *like* the object and substituting for it an inner state of mind symbolic or representative of the object. The main point, that there is nothing in the mind which was not first in the senses, remained unchanged; but the difference in the theory, as a question of psychology, was considerable.

On the special senses the Stoics have little to say.

They believed that sight depended on the emission of rays from the eye; these rays streamed forth in shape like a cone of which the base rested on the object and the point on the eye. All things being material, darkness must be considered an object which we see. Failure of sight occurs only when the pneuma of the eye is not active enough to reach the object or the object is too near; in the latter case, being near the point of the cone, the object is not covered by the rays, for they have not spread sufficiently to embrace it.

In the case of hearing, the sound actually heard is due to the wave of air which reaches the ear; a voice or any sonant object produces movement in the adjacent air, which in its turn sets in motion the air next to it, and this motion spreads like the ripples on a pool. Both sight and hearing, therefore, are mediated forms of touch. The other senses are similarly regarded.

§ 5. The Stoic psychology exhibits clearly the combination of analysis with the idea of development. In dealing with the mind of the individual the Stoics begin from the notion of the mind as devoid of all content, a white sheet on which the senses write their various characters. We have already seen that sensation was variously described as an impression or a change. The term impression implies pure passivity of the mind. But the Stoics were not inclined, as a whole, to support this doctrine. Their central thought is rather of co-operation; the object acts as a stimulus to the mind and the mind reacts to the stimulus. The Stoic arrived very nearly at the idea of forms of thought natural to the mind; but as nothing more than a bare activity is asserted, this idea remained a mere suggestion. The Stoic theory of mental development in the individual is interesting mainly for the concessions continually made to this innate activity.

At first we are to think of a mind devoid of content subjected to the action of an object. The result is an image of the object, a presentation as the modern psychologist says. For this the Stoic used the term Phantasy (*φαντασία*), which may be translated "imagination," if that term is taken in the strict sense of image-making. Phantasy is etymologically connected with light. The word idea also contains the notion of something seen (Cicero uses visum for this presentation). So that ideation will also represent this first stage of mental life. The phantasy is not unlike light in one respect; it shows the object to the mind and illuminates the mind; it is "an affection occurring in the soul, revealing both itself and that which caused it." In one and the same experience we know what whiteness is as a sensation, and also that this object before us is white.

The Stoic uses imagination where Aristotle would have written sensation. Apart from this difference the doctrine of Aristotle is closely followed. Experience is declared to be the result of presentations retained by the mind. A number of single sensations grow gradually into preconceptions or anticipations (*προλήψεις*). These are concepts which develop automatically in the mind of the individual. They are the work of the mind: not mere deposits or precipitates of experience, but actual products due to the activity of the soul. Here again we find in Stoicism a revision of Aristotle. Aristotle speaks of sensation as a critical faculty: the Stoic regards sensation as an activity of the central reason and the basis of an elaborate system of activities. The modes of mental activity are numbered and named; they are (1) incidence, (2) analogy, (3) transposition, (4) resemblance, (5) composition, (6) opposition, (7) translation, (8) privation. For example: in composition the mind creates an idea of a centaur by putting together presentations given

separately in actual experience; as a case of opposition there is the notion of death, framed as the opposite of life. Clearly we have in this list a tentative collection of forms of thought; they are almost forms of perception, for they are not on a level with categories of the understanding. Also, they appear to embody partly the principles of association of ideas which the Stoic may have wished to exhibit as activities of constructive reason.

The result of this process is a body of ideas common to all men. As reason is ultimately one, and all minds are parts of one Mind (or Fire), the Stoics logically assume that all minds come to similar states; in short, the content as well as the substance is similar in all. Hence we have the doctrine of a common reason or general disposition (*consuetudo* in Cicero). In later writers this is used as a test of truth; for what is universally believed is thus the ultimate exhibition of the reason diffused throughout the universe; universality is a mark of ultimate truth because it is a sign of the fact that in these beliefs the one Reason, the God in us, is manifest.

We have seen so far how the content of the mind arises naturally in the growth of experience. There are still some parts of this content which remain unexplained. In addition to the preconceptions already mentioned as arising spontaneously there are in the mind also ideas derived from instruction. Aristotle had already noted that the voice of the teacher is a Logos of a kind. The Stoic saw in the special sciences a kind of knowledge which could be attained as a rule only from a teacher. The reason of the individual therefore develops under the influence partly of a world of objects, partly of rational intercourse.

In addition to this genetic account of mental development there is also the question of the nature of mental activity. This element is called assent (*συγκατάθεσις*).

The reaction of the mind to the presentations is a kind of affirmation or acceptance of the truth. This takes place at all stages and gives rise to the need for a criterion in each case. In the region of presentation (*φαντασία*) there is possibility of abnormal as well as normal action. In normal cases there is a real object (*φανταστόν*); in the abnormal cases there is presentation with no objective counterpart. These are called empty excitations, vain imaginings, having only a false appearance of objective truth (*φανταστικόν*). But how do we know the true from the false? Here the Stoic attempted to find a character in the object which was given also in the presentation. Conviction, they thought, being a mark of the inner state, must represent a quality of the object. They called such presentations cataleptic (*φαντασία καταληπτική*), and assigned this effect to a peculiar element (*ἰδίωμά τι*) in the object. Here the Stoic showed a complete misunderstanding of the real nature of psychological certainty. Instead of seeing that conviction may always exist where it is not justified, they kept before them the idea of the wise man who never errs. Excluding from such an ideal any possibility of abnormal states of mind, they felt safe in describing the ideal man's certainty as the natural product of the real object; for his judgments are never disturbed by subjective states, such as passion, and he must therefore have a final criterion of truth and falsity. In this, as in their ethical theory, the Stoics are hampered by the assumption of a pure reason which acts infallibly when free from disturbances. Error of conduct they refer to errors of judgment; and errors of judgment are due to diseased states of mind, the obliquities of passion, which cause assent to be wrongly given. Knowledge in the proper sense (*ἐπιστήμη*) is for the Stoic as it was for Plato, the unchangeable and unshakable grasp of reality. Such a theory implies the idea that reality is a fixed

objective system producing its own effects in the mind; to which is added the idea that the mind is that reason within us which is by its own nature infallible. The emergence of this reason in man was ascribed to a process, and the creature becomes really rational in the fourteenth year. The central reason then dominates the whole being of the individual; reason can be said to develop in the sense that it comes to a knowledge of itself. From this the Stoic derived the idea of self-consciousness and of conscience (*συνείδησις*). The latter is merely self-consciousness in the sphere of rational choice, that is, of good and evil. The content which the individual's mind ultimately has is its own reason developed from a potential to an actual state. In this sense all knowledge is innate; but it should be noticed that the Stoics have no theory of innate ideas as definite notions always present in the mind. The Stoic rewrites the Platonic doctrine of reminiscence by the aid of Aristotle's doctrine of development. The origin of all knowledge as content of the mind is empirical, and the theory would be completely empirical if it were not for the fact that reason is not itself a product of experience. The Stoic could say (with Leibniz) that everything comes through the senses except the intellect itself. But that is a great reservation, and the Stoics were never quite clear how far knowledge was the product of experience, and how far it was the upcoming of a reason embedded in man's nature. This ambiguity shows itself even in the theory of sensation; for Stoic writings vacillate between the idea of sensation going inward to the central reason, and a central reason going out through sense-organs which it used as its channels.

The reason (*λόγος*) has an inner activity and an outer activity. As inner reason (*λόγος ἐνδιαθετός*) it is the faculty of judgment and choice; as outer reason it is the power of speech (*λόγος προφορικός*). In this psychology

of cognition the interesting feature is the emphasis laid on the individual's activity. While the presentation has the quality of being convincing, the actual assent is given by the individual and is his own independent action. Truth and error are therefore qualities of our judgment; the ideal of reason is a perfect judgment. This is for the Stoic a prologue to his central theme, the attainment of an infallible judgment. Reason in itself has no tendency to error; man has by nature the infallible reason; it follows that truth is natural, error unnatural; if men err it is through some depravity, and the supreme end of all science is the discovery of a cure for this depravity. The discussion of this corruption of nature forms the theory of emotions or mental disturbances which is the central portion of Stoic psychology, because it is most closely related to their practical interests.

§ 6. An error (ἁμαρτία) is a false judgment in the theoretical sphere; it is distinct from that falsity which arises when a judgment is vitiated by perverse will or desire. Thus the Stoics would not admit that vice is ignorance but assert that it is due to want of restraint. This implies siding with Aristotle against Socrates.

So long as the idea of universal reason prevailed the freedom of man could only be defended through the idea of concausation. Chrysippus appears to have explained freedom as the possibility of co-operating with the causality in the universe. Freedom is thus reduced to acquiescence; human action is destined but right action is the product of a state of mind in which the individual will is in harmony with the course of destiny. There is no power in man that can change the course of nature; on the other hand, purely rational action is in accordance with nature. The Stoic idea of harmony (*convenienter naturæ vivere*) is thus at first a harmony of man with the universe in

which freedom is the willing fulfilment of unchangeable laws.

The definition of emotions, or mental disturbances attributed to Zeno is quoted in Diogenes Lærtius as "an irrational and unnatural movement of the soul or impulse in excess." The basis of the definition is the idea of impulse which is a tendency of the soul to or from something. Impulse (ὁρμή) covers both appetite (ὁρμή) and aversion (ἀφορμή). These are obscure inclinations natural to creatures endowed with sensation, and are really subconscious workings of reason. As the creature attains a higher degree of reason impulse becomes rational (λογική) and becomes an element in conduct (πρακτική). In place of mere impulse we now have conscious adoption of ends of action (ὄρεξις καὶ ἔκκλισις). The will to attain or avoid is now a fully conscious assent; conversely assent is will; the distinction of intellect and will disappears and clear understanding in the sphere of practice is made identical with will. That mental disturbances are judgments was a dogma consistently held by Stoics of the early, middle, and late schools alike. The position involved rejecting the old antithesis of rational and irrational parts of the soul. The Stoics declare that virtue is knowledge; they do not agree that vice is ignorance; whether good or bad, the result is due to reason and the person is responsible. From the universal standpoint sheer fatalism seems the necessary corollary of the Stoic doctrine of reason. When, in later Stoicism, more attention is paid to the individual, the idea of harmony is rather that of harmony in the soul: every effect is the inevitable outcome of its cause, but man is not compelled to be irrational; by nature he is rational, and rational conduct is always possible as well as right. Truth, both speculative and practical, is a matter of judgment, dependent therefore on someone's judgment; it is the central reason

which makes all our mental conditions to be what they are. Resting on the idea of self-conscious unity, the Stoic refuses to regard man as a thing acted upon by imaginations or impulses from without; as effective factors in life these are not impressions but rather expressions of the self. Man is not a slave to passions; there is no "lower" self tyrannising over a "higher"; the affective side of our nature (τὸ παθητικόν) is not essentially distinct from the rational (τὸ λογιστικόν). The only valid distinction then is between right and wrong activities of the reason; the ideal is right reason, and with its attainment disappear all mental disturbances. The passions are diseases of reason; they are not (as the Peripatetics held) useful and good in some degree; a slight disease is not health, and a modified passion is not reason.

Stoicism underwent continual modification; its primary severity was not in accord with the varieties of human experience. Upon this point differences arose when it became apparent that error and vice are not identical in nature. A wrong opinion may be corrected when a vicious habit cannot be changed. The later Stoics consequently make allowance for habit and bent of character; they admit that vice becomes incorrigible and virtually adopt Aristotle's opinion that vice is in our power at first but may in time pass into a confirmed and unchangeable character, a second nature. A second source of modification arose from questions as to the causes of emotional excess. The early Stoics assign no cause but reason itself; the emotions are judgments and indicate a corruption of reason; but for this corruption no cause was assigned. The late Stoics, Epictetus and Marcus Aurelius, assign the cause to circumstances and influences, to things which are therefore to some extent beyond our power. In its analysis of conduct Stoicism became gradually more normal and assumed the saner positions of Aristotle.

It continued to be obsessed by the idea of self-sufficiency; the self-sufficiency (αὐταρκεία) of the Aristotelian ideal became an object of passionate and illogical devotion. The earliest teachers, Zeno and Chrysippus, paid more attention to general theories and concealed the fallacies of their position by avoiding details. The later Stoics are severely personal and self-conscious; they struggle with the problems of daily existence, and honestly strive to explain how a man can avoid folly and keep his temper. As we have seen, the influence of circumstances was admitted; the wise man was not to be a rock that nothing could move; lapses were inevitable, and the mind no less than the body was subject to contagion and evil communications. But, if circumstances produce the mental disturbances, are we to rely on circumstances to effect the cure and restore the balance? The dignity of the Stoic here came to the rescue; he remained to the end convinced that the will of man was supreme over all external conditions. Into the morass of difficulties thus caused there is no need to plunge. Stoicism ended in moral fervour and logical bankruptcy. No one was able to cope with the antinomy of natural causality and moral freedom. The earlier Stoics were more scientific in temper; they lay emphasis on law and necessity, ending with fatalism. The later Stoics are more inclined to frame maxims and meditate on the uplifting of mankind; they grasped some of the principles of education and supplied in example what they lacked in theory; they failed to explain the possibility of freedom, but they succeeded in being free.

To return to the technicalities of this discussion: the Stoics failed to solve the problems of free will, but they recognised the necessity of regarding man as a free agent; their assertion of activity was a lasting gain to philosophy. As the school developed this activity lost much of the

purely physical character given it at first. It is a matter of doubt whether the change was for the better. In the definition of joy and sorrow as expansion and contraction of the soul-matter, there was promise of a strictly scientific treatment of the emotions; the treatment was either never attempted or has been lost. In the definitions we have also a clear indication of the way in which the "excessive impulse" is to be understood. The soul as a part of nature has its own principles of movement; it can expand and contract, increase and decrease, no less than the body; it will have therefore its mean beyond which lies excess. Metaphor doubtless guided and stimulated the mind of the Stoic no less than his predecessors, and the idea of a nature that required pruning and training contained more than an analogy; it was vividly reminiscent of the natural excesses which are often strikingly physical, the insolence (ὕβρις) of the full-blooded and the cowardice of the neurasthenic. In the promise of a physiological psychology Stoicism was rich; its "materialism" is interesting on account of the concreteness of its grasp on nature; in its last days this virility failed.

The classification of feelings, including emotions, given by Stoic writers hardly deserves quotation. The basis is the distinction of normal and abnormal types. The former are the distinctive characteristics of the wise man and are called good conditions (εὐπάθειαι). They include rational desire, rational caution, and rational delight. The excessive emotions of abnormal types include pleasure, pain, irrational desire, and irrational shrinking. Under each of these main headings come many subdivisions, but the basis of the system is simple. All the reprehensible states are false or unmeasured judgments; these are divided according as they refer to the present or the past. Pleasure and pain are false judgments of the present;

desire and fear or shrinking are false judgments of the future.

Virtue and vice are described by the Stoics as states of the soul with emphasis on the physical or psychic aspects according to the bent of the particular writer. Virtue involves a good condition of the soul; in so far as this is a condition of the Pneuma it can be expressed in terms of tension or as a healthy condition. The effect is freedom from all that obstructs reason and it may therefore be described as the power of rational insight. Whether we take the physical or the psychic view virtue is a state of harmony in the moral organism while vice is the opposite. To the Platonist such a harmony seems to be attained by the victory of reason over desire, but the Stoic having refused to recognise this dualism, regards it as a natural or normal state of reason, a normal action of the reason which is possible when there is freedom from disturbances. Virtue is not wholly innate, for man has to struggle towards this ideal; nor is it a system of habits as Aristotle taught, because the source of action is not a will that can be trained by habituation, but rather a reason that has to be set at liberty. The real essence of virtue is the unimpeded activity of Reason and consists primarily in rational insight. This is the one Virtue of which all the so-called " virtues " are aspects or manifestations. As Plato had protested against a " swarm of virtues " and Aristotle had made practical insight the basis of all virtue, the Stoic position is more original in form than in matter. Even this was regarded by later writers as untenable. The doctrine is in fact only another application of the monistic principle, and its chief value lies in its attempt to express again the idea of harmony as the final goal of life. In complete virtue man attains that harmony with himself which is also harmony with universal Reason or, as later writers express it, harmony with God.

Two points remain to be noticed. The Stoic ideal is so often quoted as a passionless state that it is well to remember that the emotional quality of the permanent and praiseworthy states was fully recognised by this school. The "good conditions" included joy, rational elevation of mind and rational caution. These are mental qualities, but the Stoic regarded a quality as a definite condition of substance; just as likeness and unlikeness are based on the actual state or condition of matter (for one face is like or unlike another only in so far as the flesh and bones are in a certain condition) so goodness and badness are in the last analysis a state of soul-matter. Here the Stoic poses as a champion of enlightenment. Strength, he would say, is a thing, it is really muscle; disease is a thing, it is blood in an evil condition. And so, in their paradoxical phrase, "virtue is material"; for to be virtuous is to be in a certain state or condition and therefore to have a certain state or condition of one's material self.

The mysticism which forms a large part of Stoic teaching is only superficially opposed to this severer strain of thought. The idea of man as an integral part of the universe and of human mind as a part of universal mind, leads naturally to a doctrine of "sympathy." Nothing can happen in the universe without producing its effect in every part. An understanding of one part leads to a knowledge of another, and, as every cause has its effect, an insight into the future can be derived from the present. Hence the belief in divination and in a faculty of divination. The relation of the individual to the universal soul is an eternal fact; the relation is not always consciously recognised but at times becomes evident, chiefly in sleep through dreams or in ecstasy through visions. As there are conditions in which the senses are inactive, the removal of sense-impressions seems to be requisite for the pro-

duction of these pure activities of reason. On one side this theory belongs to the realm of sympathetic magic which has always been associated with vague ideas about the significance of the unity of matter ; on the other it is a pure concession to fanaticism and to that type of belief in Providence which makes possible any and every explanation of coincidences. On the duration of the soul Stoic writers differed. The original doctrine seems to have been a theory of limited immortality ; the soul persisted after separation from the body until the final conflagration of the world in which all things ended one cycle of existence.

CHAPTER XVI

THE EPICUREAN DOCTRINE

§ 1. The school of Epicurus has only one positive doctrine, that the end of life is Happiness. For the rest its tenets are negations; it denies immaterial reality, final causes, immortality of the soul, and universal ideas. These negations become intelligible if the relation of Epicurean to Stoic doctrine is remembered. The Stoic sank the temporal and the individual beneath the eternal and the universal. The Epicurean is an atomist in theory and practice; he believes in one life and that limited; he believes in his own reason and not in Universal Reason; he believes in his own purposes but not in Providence; in short, he is satisfied with a universe which is just that of the Stoics without their "Reason." If the Stoic could say that Nature and Reason are the same, the Epicurean could declare that our natures may be rational, but there is no real thing which we can call Nature in general or Reason in general, and therefore the Stoic formulæ were extravagances. The opposition on this point is far reaching. The denial of Reason as defined by the Stoics carries with it the denial of final causes. The Epicurean has to write his history of the universe without the Stoic God, for he feels that he has no need of that hypothesis. The result is materialism. From the atoms all things arise under mechanical laws, and from the movement of atoms all occurrences can be explained. Physics may not suffer much from such a prejudiced treatment, but psychology is hopelessly maimed. A

lengthy study of Epicureanism only reveals more and more clearly that its teaching, when not strictly ethical, was nothing but the provision of dogmas which filled out the traditional notion of a system. A brief summary will suffice for this part. The Epicurean doctrine asserts that the soul is corporeal, it is a body and part of body. The doctrine of atoms reduces all the real to some form of body occupying space, the criterion of real existence being the power of receiving and producing impressions; the soul is asserted to be "corporeal" with the implication that it is active and passive in relation to other bodies. Its genus then is that of the atoms; its specific difference is in the degree of its qualities, its superior mobility and lightness; in some respects it is similar to fire but is not by nature identical with fire; heat is a fundamental element in its nature and degrees of temperature constitute the peculiar qualities of individual souls. The soul has two parts, an irrational part diffused through the whole body (*anima* of Lucretius) and a rational part (*animus*) situated in the breast.

Thus conceived the soul is part of the world of nature and psychology a branch of physics. In a sense the theory is materialistic, but the materialism of this period involves little more than the idea of a real unity between soul and body; the opposition of mind and matter is a dualism not yet evolved, and the assertion that the soul is corporeal means only that it is capable of receiving impressions from bodies and producing motion in them. The given reality is the unity of body and soul; neither is known without the other; the dissolution of the partnership is the destruction of the self; in the hereafter there may still be matter and aggregates of matter, but the extinction of the individual self is the essence of death.

The soul, thus diffused like a subtle air through the body, gives life to every part; its presence all through the

body accounts for the sympathy by which the whole feels the affections of each part; taken as an active substance contained by the body it explains all action. The Soul is a mixture of four substances; of these three are like gases, one hot, one cold, and one similar to air; the fourth is nameless and is the seat of sensation. This last substance is self-moving, it is the soul of our soul; it moves itself and communicates its motion to the other substances and, as these move the body in which they are lodged, the motion thus begun spreads in widening circles outside to the world of objects.

The interests of Epicurus lead him to construct a psychology for the purpose of showing that a mechanical theory of life is possible. The rational part of the soul includes three faculties: sensation, anticipation, and passion; of these the first two are concerned with knowledge and the last with action.

§ 2. All our sensations are effects produced in the respective organs of sense by the effluxes from objects, the emanations or εἴδωλα. Thus sight is due to the impact upon the eye of visible images, not to rays emanating from the eyes or change in a medium (as in Aristotle). A similar explanation can be given of every sensation. If we thus reduce all sensation to the action of external bodies on passive organs of sense, the differences in the quality of sensations must be explained by differences in the form or movement of the active bodies. Differences of colour are explained as due to the nature of the blow which the atoms give to the eye; the atoms themselves differ in figure, and their effect on the organs of sense varies accordingly. The atomic theory has the great advantage of simplicity; it reduces the external agency to its lowest possible terms; and thus it corrects incidentally errors which arose from undue multiplication of

causes. Examples of this tendency to simplification are, first, the insistence on the fact that all qualities except extension, movement, and weight are secondary: sensation is a relation between object and subject which is realised when the atoms brought into contact with the organ of sense are adapted to its capacities. A second example of simplification is the assertion that the organ is the seat of sensation; we do not see with the eye in the sense that the soul looks through the eye as through a window; if that were so the soul would see best without the eye; on the contrary, it is the eye itself that sees.

The atoms given off by bodies come through the empty spaces or pores to the organ of sensation, and the impression converts the power of sensation into a definite sensation. The term ἐπαίσθημα seems to indicate a recognition of the fact that perception is the result of impressions produced on the sensitive organ; it is not the impression itself that we perceive, but the impression terminates in a perception of the object. The case of sight is treated in detail by Lucretius. Vision is the product of "images" striking on the eye; the object appears to be distant when the atoms drive a large quantity of air before them, the amount of air being relative to the distance traversed; similarly one can see out of the dark because the light comes inward, but one cannot see out of the light into the dark because the dark air is then coming in and obstructs the organ. The sun blinds the eye because the fiery particles which make up its image are too strong for the eye to endure; angular objects appear round if they are distant because the atoms become displaced in transit, by the air; the corners of the "image" are rubbed off. In a similar fashion all sensations are explained, atoms and motion being the only agents; the theory of Democritus is repeated with one variation, namely, omission of the air as a medium in sight and hearing. The

omission of this medium is easily explained: the air for Epicurus is only a collection of atoms, and through its interstices the atoms from invisible bodies make their way. The air is therefore not required as a medium, though it may prove an obstruction to the transmission of "idola," i.e. the atoms coming from the object to the sense-organ.

In its broad lines this method of explaining sensation was at the time anything but contemptible. It included the idea of motion; it explained quite simply the relation of objects to sense-organ; its hypotheses were few and it had all the simplicity which is so fatally attractive to those who think that "common sense" is better than speculation. The failure of the method became more apparent when it was extended beyond the realm of sensation to that of reason. For Epicurus explained thought as he explained sensation. Atoms striking on the subtle matter of the thinking soul cause its ideas, just as the impact of atoms on the sense-organs cause sensations. In this way Epicurus explains our knowledge of imperceptible objects, what we should now call microscopic objects. The difference between sense and reason is clearly only one of degree; Epicurus did not believe in a distinct class of intelligible objects.

§ 3. It is still possible to write a physiology of the senses which some people accept as an explanation of sensations. It was possible for Epicurus to write a physical theory of sensation which doubtless satisfied the uncritical. But neither a physiology nor a physical explanation of reason has ever proved more than an antidote to exaggerated mysticism. To see what Epicurus did toward the correction of Stoicism it will be necessary to pause and consider the nature of the soul's activities. In the most elementary function of the soul, namely sensation,

there is nothing but a relation between the object and the sense-organ. Here there is no room for error. But the motion begun by the impression is carried inwards and another motion consequently arises within the mind itself. This inner movement constitutes opinion, the next higher function after sensation. At this point error becomes possible; for motion in the mind added to an impression constitutes judgment, and error is the addition of an irrelevant judgment or inner motion to the impression. Thus the Epicurean theory evolves a mechanical doctrine of thought. This is really the doctrine of association of ideas expanded to explain thought. Those ideas in us which are not directly injected by the objects are complex products due to the following processes: first, a notion may arise from many similar impressions, e.g. the general idea of man from the sight of many men; secondly, by change of proportions as the idea of giant or pigmy from that of normal men; thirdly, from similarity; fourthly, from combination as in the idea of a centaur. Thus the whole content of the mind is either impressions or complex products of impressions. A certain degree of mental activity is here admitted and attention is recognised as a condition of some perceptions. Imagination is explained by the Epicurean as different from sensation, but only because the atoms which penetrate to the mind are finer than those which affect the senses. The Epicurean analysis of the soul has one distinctive feature; it is at least a candid acknowledgment that sensation cannot be explained, for certainly no one could say that it is explained by asserting the existence of a part or quality whose only mark is the fact that we have sensations. But in spite of the inadequacy no more is attempted. Man has a power of sensation; out of his sensations come images; the images fuse into composite pictures which he uses as general ideas; this is his reason and his know-

ledge. The theory follows the same line as those of the Stoic doctrine with a careful avoidance of real universals. For the Epicurean universal ideas are never more than complex products of particular ideas, ultimately of particular sensations. But with the Epicurean, as with the Stoic, mind is not purely passive; it has some activity and exercises discrimination. The Stoic looked at this from the point of view of psychology and called it "assent." Epicurus appears to have tried to express this in terms of physics; he spoke of an activity of the mind as though it threw itself into the stream of impressions and changed them, as a current of air breaks up a floating ring of smoke. The meaning of this is very obscure, but it seems to be a doctrine of error stated in terms of physical action. Epicurus was no fatalist; he believed in freedom of the will; he was probably well aware that, as Aristotle had said, a man cannot be free if he has no control over the contents of his mind (i.e. the imaginations); and he therefore made room for this degree of mental activity. Error can only be explained as our activity corrupting the natural union of impressions.

The idea of the soul's activity is intimately connected with another, namely, the question of freedom in choice. It is obvious that a theory of natural causation is liable to end in a doctrine of fatalism. Such a result would have wrecked all the aims of Epicurus. He avoided it by a legitimate handling of the atomic theory; though the argument fell into unmerited disgrace through the unintelligent criticisms of Cicero. This dialectical *tour de force* is known as the declination of the atom (*clinamen*, παρέγκλισις). It amounts to nothing more than the assertion that the atom never loses its original power of self-motion. Even in closely packed matter, e.g. a piece of iron, the atoms move incessantly. They are hindered and obstructed, but yet their activity is ceaseless. So in

man the atom never ceases to exert itself; it fulfils the law of its being and co-operates with the other atoms to produce the effects we see. So long as the activity is resident in the atom its only law is its own nature. That too is the sense in which the mind is free; its power to throw itself one way or the other (the *injectus animi* of Lucretius) is the expression of its own nature and that is freedom. The point of the argument is its opposition to Stoic doctrines of fate. The Stoics introduced supernatural agencies (as the Epicurean would say). But naturalism has at all times prided itself on being immanent. Here Epicurus has succeeded in expounding the nature of immanent causality as opposed to transcendent control; it is the one piece of really strong argument in the whole theory, and its appearance is explained quite simply by the fact that in it Epicurus took a real interest. For physics, after all, mattered very little, and the only topic equal to this in importance is that of pleasure. Here too we have a physical theory starting from the idea that affections are movements, psychic motions. The Cyrenaic had virtually maintained that pleasure is a form of excitement, a consciousness of being pleased. This Epicurus does not accept. He undertakes a fresh analysis of the relation between pleasure and sensation. As we have already seen, the ancients took motion as a generic term and counted both sensation and feeling as species of motion. Feelings, that is pleasure and pain, are therefore primarily motions, and the first point to decide is how the quality becomes attached to the motion. Aristippus cut the knot by classifying motion as smooth and rough, or gentle and violent. He admitted a possible state of motionless calm, but only the condition of gentle movement was called desirable. Plato added a teleological qualification and spoke of motion as in accord with or contrary to nature. Aristotle made pleasure a mark of

perfection and not an end at all. Epicurus abandons Aristotle in so far as he still desires to make Pleasure the Good and say what it *is*, not merely what it does. Plato is rejected because all teleology is avoided, so we come back to Aristippus whom Epicurus follows because the Cyrenaic theory represents the view that pleasure is the good and all pleasure is really a state of bodily feeling: but Epicurus modifies the Cyrenaic doctrine in two important ways. In the first place, Aristippus recognised three terms: gentle motion, violent motion, absence of motion. This does not really help us, because either of the former terms is dual. We might have, e.g., a gentle pain or a violent pain, and unless some proof is given that mere gentleness of motion is pleasant, we still have to decide what makes the pleasantness of it. Plato had seen this, as Herbert Spencer saw that pleasure can only be an end if it is ultimately an increase of vitality or something more fundamental than mere pleasantness. Epicurus goes into the question more deeply than Aristippus, as indeed the work of Plato and Aristotle compelled him to do. Pleasure, he says, as a distinctive thing is a kind of excess, a reaction from pain. Life swings like a pendulum from extreme to extreme, pain is a motion and pleasure is a motion, but not to move is best. This seems like the Stoic doctrine, a theory of apathy or freedom from all affections; but from that it is rescued by an Aristotelian element. From Aristotle men had learned that there is an activity which is not perpetual change, a sort of equilibrium of motion, and Epicurus makes his Good a pleasure of this kind. This can be called freedom from disturbance (ataraxy), for it is a state of persistent equipoise, and ascribed to reason because reason is the regulating factor in life. The Stoic opposed reason to the senses and so tended to make the best state of man a state of reason devoid of sensation. The Epicurean could not

see any meaning in this ; he believed that a good digestion and pleasant sights and sounds really made up the pleasure that men wanted. Far too much has been made of the sensuous aspect of this statement. To understand it properly we must think of a modern parallel, such as the opposition between Kant and the Utilitarians. Kant was a Stoic in temperament and wished to exclude from the emotions which accompany our resolves all those which he called pathological elements. The Utilitarian is always Epicurean inasmuch as he would include in the idea of the Good all that makes for physical comfort, such as good health, good food, and a good income ; while in the motives to good action he would admit the desire to make and to get happiness as a condition of general contentment. Epicurus gives us a dialectical defence of the position which is only a technical way of saying that the pleasures of the senses are transient. Reason alone can so guide and control men that they get the greatest possible amount of pleasure over the greatest length of time. Violent altercations, the interchange of " paradise and the gutter " which the drunkard calls life, were wholly rejected by Epicurus. As this was only common sense worked up into a theory it was easily associated with the continuous cheerfulness (εὐθυμία) which Democritus had already named. Epicurus associated with this a classification of desires as (*a*) necessary and natural, (*b*) natural but not necessary, (*c*) neither natural nor necessary. Of these the last should be overcome ; the second moderated ; the first alone require satisfaction. Thus contentment is easily obtained by the wise man. This is an ethical doctrine which has no further psychological significance.

A few stray points serve to show the limits of Epicureanism. The higher faculties are explained on mechanical principles. There are objects of the mind which the

senses do not perceive; but these are not intelligible objects in the Platonic sense; they are merely realities of so fine a material texture that they escape the sense and can affect only the soul itself. In the same way dreams and apparitions are explained as the effects of material bodies extremely subtle in texture. The immortality of the soul is disproved: because the soul is a composite body made of atoms and death is the dispersion of its parts. Life as we know it seems dependent on the union of soul and body; the body is declared by Epicurus to be necessary for all sensation. Death ends this. But Epicurus might have declared in favour of immortality if he had considered the fact that the most subtle forms of matter are relatively least likely to disintegrate.

CHAPTER XVII

PROGRESS OF THEORY IN THE LAST CENTURY B.C.

§ 1. The various tendencies toward a mystical Pythagorism which developed among the followers of the Academy proved unsatisfactory. As a consequence metaphysical speculation languishes and attempts are made to develop the ethical side of Platonism or supply its deficiencies in the sphere of science. This involves abandoning the pure reason and considering the significance of those faculties which come lower on the psychic scale. Of these it is Belief (πίστις) that actually attracts attention. The problem for solution is restated in the form "how can man attain the certainty which he requires for the practical life?"

Arcesilas explains his position in his criticism of the Stoic idea of conviction. The Stoic doctrine attached to certain representations the quality of being convincing. Arcesilas asserts that this really implies that the individual acquiesces in the apparent truth, affirms an opinion with regard to it, and thereby incurs the possibility of error. This criticism may be taken to mean that there is no psychological mark of certainty; truth is not a quality attached to an idea and perceived along with it; there is nothing that by itself produces in us conviction (πάντα ἔσται ἀκατάληπτα). Scepticism would be the natural result of this if the psychological idea was the only point of interest. But a purely negative position is useless: the practical life demands some

further explanation of the certainty upon which men act, a certainty which is recognised as in some sense rational. Arcesilas admits this element of rationality in human action and interprets it as a judgment of probability; action is rational when based on the highest probability (τὸ εὔλογον). Action, therefore, is not as a rule the outcome of clear rational insight: it is an impulsive movement (ὁρμή) in the direction of the end which we *believe* to be right.

§ 2. After a lapse of eighty-six years (241–155) the Academy again came under the direction of a philosopher of distinction, Carneades, who further developed the doctrine of probability. This seems to have been accepted as a purely psychological problem; and Carneades undertakes its solution in a manner which suggests that he began from Aristotle's remarks on belief (πίστις). Knowledge is always traceable, in sense experience, to the presentation (φαντασία) without which no thinking is possible: the possibility of truth in any sense of the term depends, therefore, on the character of the act of sensation. Sensation Carneades analyses as the effect of a relation between object and subject: the result, the image which we know, is thus representative of both factors, and we have not a direct knowledge of the object but know a representation of it which may be vitiated through the fault either of the object as cause or of the subject as acted upon. The senses are therefore unreliable, and the whole structure of knowledge is built on sand.

As in the case of Arcesilas, the bald conclusion that knowledge is impossible leaves on our hands the second question, what is the state of mind in which men act; for the impossibility of knowledge seems paralysing, but men do act. The answer to this question is obtained by

an analysis of Belief. Belief as the ground of action is an inner state; it is the presence of an idea which is persuasive (*πιθανὴ φαντασία*). In explaining the persuasiveness of an idea Carneades mixes the logical with the psychological aspects. The idea may be (1) probable, (2) not self-contradictory, (3) tested by reference to experience; and probability varies in degree according as one or more processes have been employed. But in spite of the confusion it is clear that Carneades has grasped the fundamental requisites of a theory of certainty based on empirical and sensational premises. He allows room for the acts of comparison and judgment which the mind naturally performs in deliberation and has given a plausible explanation of belief upon evidence, which the man of affairs might well accept as final.

After Carneades a feeble attempt was made by Philo of Larissa to restore the notion of innate ideas and supersensuous knowledge. It was opposed, nominally, by Antiochus of Ascalon; he succeeded, however, in doing nothing but what Philo had already done, namely, introduce elements from Plato and the Stoics and produce a type of eclectic doctrine which had not even the semblance of consistency.

§ 3. Parallel with the evolution of the Academy was a still more significant evolution of Stoicism. Panætius modified the Stoic doctrine in two main points. While the earlier Stoics taught a limited duration of the soul after death, Panætius denied all existence after dissolution of the body. He reduced the parts of the soul to six and then divided man into soul (*ψυχή*) and nature (*φύσις*). This dualism is made more prominent in Posidonius. The ethical interest required a real opposition between will and desire. So long as the Stoic monism remained and passion arose from reason, the basis of the moral struggle

seemed to be nothing but an illusion. Posidonius broke away from the Stoic unity and declared that Reason could not produce passions: they came from temper and desire which were distinct parts of human nature. Thus the ethical interest brings into Stoicism a strong leaven of Platonic doctrine. In place of the tentative dualism of Panætius we now find a complete opposition of soul and body (ψυχικά and σωματικά), and passions depend on physical states.

The soul is defined as an idea: it is the metaphysical ground of the body which is its extended manifestation: it has pre-existence. All these Platonic elements combine with the ethical opposition of soul and body to make a doctrine that progresses by going back. The psychology of Posidonius has been described as "a link in a great historical nexus"; it forms the point of transition from Stoic monism to Neo-Platonic views. By the time Seneca wrote, body had definitely become "the flesh" against which the spirit strives; and the "body" of Posidonius has already that taint of evil which marks the Christian idea of the flesh.

§ 4. Among the Peripatetics of this period comes Critolaus. Critolaus was a Peripatetic with a strong leaning toward Stoicism; Tertullian counted him a materialist, and the statement is justified by the description in Stobæus according to which he regarded Reason (νοῦς) as an emanation from the æther, the fifth element. His doctrine was maintained by Diodorus of Tyre, who is explicitly Stoic.

§ 5. Among the Eclectics who are predominantly Aristotelian, Andronicus of Rhodes is distinguished by his decided views on Aristotle's idea of the rational soul. He proposed to increase the number of qualities recog-

nised by Aristotle and add a fifth which would include the dynamic aspects of existence. This makes possible the recognition of a direct active relation between soul and body, and practically identifies the soul with an inner vital force which is the cause of the bodily disposition. This looks suspiciously like a misinterpretation of Aristotle's idea of "potency" (δύναμις), and certainly implies that the soul has a power of unification and organisation in respect of the elements that compose the body. The rational soul of Aristotle is, according to Andronicus, only one among other faculties. Bœthus, the disciple of Andronicus, denied the immortality of the soul: his work is unimportant except as showing how the Peripatetic doctrine was interpreted as being primarily naturalistic. At this period Aristotle seems to have been regarded as one who implicitly denied immortality.

§ 6. At the close of this era stands a most typical figure, Cicero. Stoicism has been seen reverting to Platonism; the Peripatetic doctrine has developed its naturalism almost to the verge of Stoic materialism; the Academy came under the influence of Scepticism and concentrated its attention on the problem of conduct. However little claim Cicero may have to originality, he forms a landmark in the history of psychology; from him as from a perennial fountain have flowed the phrases of generations of later writers, and he exercised immeasurable influence on succeeding generations by simply coining the expressions that transmitted Greek notions to those who used Latin as their medium of communication. A criticism of Cicero's philosophy is not required: his views were not put forward as a systematic exposition of doctrine but as a profession of belief. Occasionally his treatises are little more than rhetorical exercises. But belief is a power for good or evil, and Cicero consciously regulates his beliefs

by a utilitarian standard; no doctrine can be right that does not contribute to national welfare. Cicero believes in God primarily because that belief is a sound basis for political teaching. With it is bound up the belief in justice and a moral order; incidentally including the special Providence that watches over the Roman Empire. The soul is superior to the body; materialism is base and ethically worthless, so that in some sense the good man's creed must be a form of immaterialism. In all this there is a painful lack of philosophy, but out of it emerges an important dogma. Philosophy was, indeed, at the time almost non-existent: there seemed to be nothing so certain in the world as immediate convictions. The effects of Pyrrhonism still continued and made absolute certainty seem theoretically impossible. Driven to the last resource, the practical man falls back upon his working beliefs. Thus the ideas which are true have no guarantee but the conviction that attends them. Criticism having destroyed certainty there seems to be no road left but that which leads to a certainty that will not suffer criticism. This can only be the psychological certainty which is guaranteed by an inner conviction. Knowledge must be simply the innate idea.

In thus protecting his most cherished convictions from dialectical quibbles Cicero definitely reduced knowledge to a kind of feeling. He was perhaps hardly conscious of the revolution he produced. Henceforth the innate idea was knowledge wholly independent of experience: it was not a power realised through the laborious methods of science and actualised by discipline: it was the gift of God to man, possessed in all its entirety by all rational creatures. With its superficial similarity to the Platonic, Stoic, and Epicurean doctrines this theory seems at first to be nothing new. It was, in fact, a far-reaching perversion of all the theories that recognised an innate

capacity for knowledge; for this is not an innate capacity but innate knowledge. Guided by Stoic doctrines, Cicero makes this innate knowledge really the indwelling of God, God in us. An immediate self-consciousness thus appears as the highest type of knowledge; for it is a consciousness of God and a species of revelation. This is possible to all men and does not depend on education or training; the wayfaring man, though a fool, has in his very nature the highest forms of knowledge.

Nothing remains but to explain the apparent absence of this knowledge in many cases. That is done by distinguishing the original state of nature from depravity. If proof is required it can be derived from the animal world, where we see instinct guiding the creature to its true good. If, again, we ask what are the ideas thus described as innate, it is obvious that they will be the ideas that are found always and everywhere and among all men. As their universal presence proves them, and their occasional absence is already explained as depravity, the ideas seem clearly established. The logic is too weak to support the conclusions, but as the conclusions came first the difficulty was not felt. The real importance of the doctrine lies in the fact that it ended in a specious defence of immediate knowledge which obscured for many ages the real character of human convictions: a knowledge of evolution was required to show its fallacies and its truth: but before racial inheritance was an intelligible phrase it served to explain the stability of those beliefs which dialectic could not establish.

CHAPTER XVIII

THE IDEA OF THE SOUL IN SOME EASTERN WRITINGS

§ 1. *Indian writings.*—The different races of mankind exhibit very similar lines of development in their culture. The first condition of which any record survives is usually one of large but indefinite ideas and predominant emotionalism. This may be called the religious age, to distinguish it from the succeeding philosophic age: but the distinction is not very great; it is a distinction of the time when religion is the philosophy of a race from the time when philosophy becomes its religion. The ages of culture in India may be classified as ages of religion and philosophy, or from a more literary point of view as the Vedic, Epic, and Philosophic.

In the case of Indian philosophy the problems of chronology are unusually great. Owing to the extensive use of oral transmission it is impossible to define accurately the limits of the doctrines or the relations of their different phases. We shall assume without further discussion that the main doctrines of the six systems were in vogue during the last seven centuries before Christ. The philosophic period will, on this assumption, coincide with the rise and development of Greek philosophy. This coincidence has led to many rash speculations about the possible transference of ideas from one country to another. The assertions made nearly a century ago were too extreme in their subordination of Greek thought to Eastern in-

fluences. The truth probably is that little or no influence from the East came into Western philosophy until after the days of Aristotle and the conquests of Alexander. Human thought has the same objects all over the world. The heavens, the earth, the soul are similar for all men to a degree which fully accounts for common elements in different types of speculation. In the sphere of religious thought this fact is most obvious; it is scarcely less obvious in the region of primitive ideas about the soul, where microcosm and macrocosm are still kept closely together; it forms, therefore, a sound basis for explaining similarities in the evolution of doctrines and counteracts any excessive tendency to suspect borrowing or anticipation. In so far as men seek the truth the Universe has anticipated them all. Where records are available there is, of course, no need to reject evidence for the communication of ideas, and it will be obvious as we proceed that after the days of Alexander there was a steady flow of ideas from the East into the West, culminating in the last days of the Roman republic and surviving when, under the Empire, East and West were held together in political, religious, and intellectual co-operation. Of Indian philosophy we may say at once that its form and not its content was effective in the West; its spirit penetrated where the letter was either unknown or rejected. To define that spirit is difficult. Its essence is the desire for complete universality, combined with intense feeling leading to subjective forms of expression. To regard Eastern speculation as merely vague is to do it scant justice. In almost every system we have a wealth of detail which contradicts the common notion that Indian thought begins and ends in generalities; there are also doctrines which are definitely scientific in their teaching and show a conception of nature devoid of all mysticism. It is true that the spiritualistic doctrines are most characteristic of India, but the natural-

istic theories represent a tendency not wholly absent from any of the fully elaborated systems.

(i) The philosophy of India is usually treated as falling into six systems, namely, Sânkhya, Yoga, Nyaya, Vaiseshika, Mimansa, and Vedanta. Material for a construction of Indian psychology is found in three of these: the Sânkhya, Vedanta, and Nyaya taken with the Vaiseshika as one doctrine. There is also a doctrine ascribed to Brihaspati which may be quoted here as proof of the fact that India comprehended all types of thought. The progress of more or less idealistic theories is to be traced in the other systems. Before beginning that task the one known doctrine that is really anti-idealistic may be described. Little is known of it. Hindu writers treat it as an abomination, and partial critics have hastened to add their expressions of horror. Its main vice seems to have been that it taught "utilitarianism and crude hedonism in the most outspoken way." But perhaps a modern reader with Western notions, so far from being shocked, would find in it a relief from ultra-idealistic views. It is called Lokayata, which perhaps means world-wide system. Rejecting inspiration and even inference, it declared the senses to be the basis of all knowledge; it counted four elements only, excluding ether as being invisible; it denied the propriety of saying man has a soul, declaring these to be two terms for the same thing: the body sees, feels, thinks, and remembers. Consciousness is distinct from matter, being a product of the mixture of elements. As the intoxicating power dwells in compounds whose elements by themselves have no such power, so the power of conscious thought is a product of the mixture of elements. The soul is therefore an epiphenomenon and perishes with the body.

This type of empiricism has many parallels in Western thought, being akin to the position of Democritus or of

Hobbes. It died apparently because all interest was centred on ethical and religious norms. The Vedanta proved in the end the most popular system, and in it "there was no room for psychology." Perhaps this germ of empiricism would have produced fruit had it grown to greater dimension. There are traces in it of an opposition to superstition not unlike the Epicurean polemic; it exhibits a healthy disregard for the ideals which suppress all feeling, and for rituals which traded on human weakness to the great advantage of priestcraft. It failed to gain a foothold, and with it died the one root of physiological psychology to be found in Indian literature.

(ii) In the sphere of psychology the subjectivism of Indian thought is the all-important element. It leads to a metaphysical psychology which coexists with an independent statement of the physical nature of man. The most important of the six systems is the Vedanta.

In cases where there is neither proof nor disproof temperament induces belief. In the temperament of the disciple lies the only explanation of his belief in the final mysteries. What is demonstrable is exoteric and common to most systems; the indemonstrable is the esoteric element. The first requisite therefore for understanding a philosophy is the cultivation of the mood to which it corresponds. The Gurus of the East have understood this factor in the education of the disciple better than anyone, except perhaps their successors in the ages of mystical Christianity. On this basis the Vedanta puts in the forefront of its teaching the dogma that the highest and best state of consciousness is attained when the normal consciousness is transcended.

The Greek writers endorse the ordinary theory that sleep is a form of physical exhaustion, though they have a tendency to acknowledge that in it the soul may be set free from the body. The Vedanta is opposed to this type

of thought in making sleep a higher condition than waking. In sleep the self or consciousness is set free not so much from the body as from the limits of consciousness which constitute existence. Deep dreamless sleep therefore is an approximation to the best state; in it the soul is set free, not, as in some Greek theories, to wander abroad, but to rest in itself; the next degree is rest in the eternal consciousness.

The relation of all Western speculation to Greek philosophy tends to obscure the essential point of this position. The Greek can say that in sleep the soul is set free from the body, but such a phrase is not applicable to the Indian theory because soul is not in body as one thing in another. Body is itself a fact for consciousness best described as one of the limitations of consciousness. The Vedanta therefore attains to a remarkable degree one of the ideals of all philosophic systems, namely, pure immanence. It is concerned first and last with consciousness as an ultimate fact which must be described in terms of its own being. Thought is the ultimate fact, and the world of things known in the particular thoughts are no more than self-imposed limits.

In comparison with Western ideas the outstanding feature of this position is the bold rejection of space; the soul is not in the body as one thing in another; body is in soul as a lesser force is in a greater and as limited powers exist in an unlimited power. The waking life is an absorption in external objects which are real as means but not as ends; ultimately, therefore, unreal. The result is an apotheosis of unconsciousness, or perhaps subconsciousness would be the better term. As Professor Deussen says, Indian thought "applied itself to the most abstruse problems before it was even remotely in a position to treat them intelligently." To make the treatment intelligent would require all that we know to-day about subconscious-

ness, the psychological " fringe," and the function in our conscious life of all the factors which escape attention. In the absence of all this it is futile to try and connect modern ideas, even those of Schopenhauer, with Vedantic lore. In Plotinus or St. Augustine we can find better examples of the relations possible between Western and Eastern methods of thought, and neo-Platonism is throughout its history the most successful union between Eastern universalism and Western practical tendencies.

Indian philosophy begins from the idea that active thought either moves outward to things or inward to the self. In the latter case thought becomes merged in the distinctionless unity of the One, the Absolute which is logically the presupposition of all forms of Being and also the metaphysical First Unity. The movement outward to a world of things is marked by ever-increasing complexity or plurality. Hence the clue to the riddle of the world is obtained : plurality is the burden from which the self must be delivered by contemplation ; the plurality is made by thought and is an appearance, an illusion. The reality is unlimited thought ; the illusion is a world of limited thoughts. From this a descriptive psychology follows by a process of deductions or derivations. The thought which is universal or cosmic has for its first limitation the self ; as a mere limitation the distinction of the individual from the cosmic self is not a real difference or a distinction of kind, but only a negation which may be overcome. Given the distinction of cosmic thought (Brahman) from the individual self (Atman), we have in the atman taken separately the sphere of psychology. This may be called idealistic in so far as it gives prominence to thought over matter, but as the term idealistic is now applied particularly to theories of knowledge it will prove less confusing to call this spiritualistic. For the self is primarily life identified with consciousness, and the

consciousness is a thinking substance. As substance it is indistinguishable from the vital air, though the difference between consciousness as a function and this air as the substantive consciousness is dogmatically asserted from time to time. The vital air is the breath of life, and through or in it the self has its existence ; but it is not the self in essence, the self may withdraw from the vital air into the cosmic self and must therefore be distinct from the vital air. This concept of the self may be elucidated by enumerating some of its characteristics. It has neither beginning nor end ; birth and death are merely the occasions upon which it becomes subject to or free from limitations. Against other theorists the Vedanta declares (*a*) that the organisation of matter is not the productive cause of thought or conscious life ; (*b*) the self is intelligent in its own nature. With this the Vedanta asserts that the self always thinks, rejecting the alternative idea that its thinking depends on its relation to the body. (*c*) It is atomic—that is, unextended. The argument of the opponent that it must be where sensation is and sensation is felt over all the body, is rejected. The extension ascribable to the soul is not material but rather like a sphere of control or the range of a perfume. This latter example was a little unfortunate in view of the opponent's readiness to show that a perfume is a diffusion of particles. Still the point maintained is that the soul goes forth immaterially in so far as there is no reduction of quantity through the process. Perhaps the Vedantist meant only that the soul is where it acts. (*d*) As extension is denied change of quantity is also denied. In the case of the self, more and less mean only degrees of actuality. Change of the self implies no addition or subtraction, but only the fact of becoming actually that which it always was potentially. (*e*) After these statements it seems contradictory to assign the self a place. Yet the Vedanta

says the self is in the heart. The point is thus explained by one commentator: "Just as a drop of sandal ointment, though in actual contact with the body in one spot only, yet produces a refreshing sensation extending over the whole body; so the soul, though abiding in one point of the body only, may be the cause of a perception extending over the entire body." The reader may be left to decide whether this assists a solution of the difficulty.

So far our psychology has given a clear statement of the points involved in the idea of an immaterial soul in respect of generation, quantity, and qualitative change; it has made a definite statement as to the seat of the soul; we require next a description of the man.

In the Upanishads man is a being composed of many parts which form a scale from the grossest, the outer material being, to the subtlest, the inner self. There is no dividing line between body and mind, but a series of refinements by which the extremes of this scale are connected. Man is accordingly not so much a composite being as a complex being, and the theory works consistently from the inner core of pure consciousness outward to the flesh. There is no need to repeat the crude details of ancient physiology, but the scheme as a whole presents some points which are of great interest in comparison with the ideas of other nations.

There are two ways in which Hindu philosophers treat the individual, either (1) as a complex of selves or (2) according to degrees of reality. The former treatment leads to a distinction of five selves, which are respectively (*a*) the outer body; (*b*) the natural vital force, or breath of life or "vital air"; (*c*) the spiritual vital force, the Manas, i.e. will or active spirit; (*d*) the principle of knowledge; and (*e*) the final innermost self, "the self dependent on bliss," the self which transcends all knowledge and survives when subject and object are no longer opposed. In

distinction from this the latter treatment leads to a recognition of three degrees of reality, namely (*a*) the body as seen in reflections and taken to be the self only by the ignorant; (*b*) the individual consciousness, also mistaken for the self by those who lack the highest knowledge; (*c*) the supreme self, the only real sense of the word self.

These two modes of treatment are clearly compatible, and taken together they show close affinity to the Platonic method of analysis, and still closer resemblance to the Platonism of Alexandria with its classification of individuals as material, intellectual, and spiritual. This elaboration of the idea of outer and inner selves, of objective and subjective selves, is carried further by the distinction of two bodies, namely, the gross body and the subtle body. Neither of these is the self, but rather the external or plural aspect of the self. The gross body is that self which is an object among objects, the material structure which other persons see. It consists of many parts (variously enumerated in the ordinary language of anatomy), of which the chief are the organs of sense, referred to as "gates of the body." In this connexion we are to think only of the material structures, the eyes or ears, etc., without reference to their functions. It is interesting to note that the earlier traditions show respect for the material body as "the City of Brahman," while later writers adopted an ascetic view, and spoke of it as repulsive and contemptible. Great emphasis is laid on the importance of the heart as the centre from which spring the powers of the soul, and to which they are all united as a central sensorium. This body is the "self which consists of food," the product of nutrition, composed of the five elements. It is traversed by veins which arise from the heart, "filled with white, grey, brown, green, and red fluid." This curious idea is explained by the function of

the heart as the seat of the soul. The soul, dwelling in the heart, must have a way out; it is through the veins that it goes forth to the outer heat to be reunited with it, and the colours of the veins of the heart are therefore connected with the theory that the rays of the sun have five colours.

The material organ is the instrument of a power which stands, as it were, behind it. The ear is not hearing, and the eye is not sight; so that there must be a distinction between the faculty and the organ. It seems clear that the later Vedanta at least regarded these as aspects or phases of consciousness, modes of its activity. As there is here a kind of duplication of the physical organism in a psychic organism, so we find the soul is given a "subtle body," made up of the subtle part of the elements which form the seed of the body. This subtle body outlives the gross body and goes with the soul in its transmigrations. A soul when "set free" has in fact (*a*) its powers, (*b*) the particular air which brings about its release, (*c*) its substratum, and (*d*) its character.

Leaving the constitution of the self in order to consider its states, we find at once that Indian philosophy subordinates everything to the ethical or religious interest. It puts the goal of conscious life in the negation of all definite forms of consciousness, and its theory of knowledge is therefore fundamentally a theory of freedom from knowledge. The states of consciousness in which it is interested are the antitheses, ignorance and knowledge, or waking and sleeping. We have seen the significance of these. Nothing more requires to be said except to remark that the later systems recognise a state of self-absorption, which is not identical with deep sleep, but can be attained through meditation in full wakefulness. Knowledge in the sense of scientific knowledge is included under the term ignorance; self-knowledge is the true opposite of ignorance.

This theory of consciousness is obviously the product of

a highly developed culture. It belongs to a late period of national development when primitive ideas had already undergone great philosophical refinement, particularly those ideas which sprang from interest in the future life. One mark of such late periods is the degree to which the future life is interpreted subjectively. The earlier Indian traditions include much that is distinctly unphilosophical in character. The Upanishads to some degree, and the laws of Manu to a greater degree, teach transmigration with future rewards and punishments; they speak of a day of weighing in the sense of a last judgment, of a bridge over which the souls pass into the next world, with other details that belong to the cruder period in which imagination and analogy are not subject to criticism. In India, as in other lands, the cruder doctrines have had comparatively greater vitality and ideas which criticism discards have remained the cardinal points of popular belief. Among these transmigration of the soul was a belief that naturally appealed to many and remained a belief of the people long after it had ceased to be a doctrine of the philosophers. In the highest form of Indian philosophy it is clear that the doctrine of transmigration had evolved into a doctrine of the immanence of individual souls in the cosmic soul, and so reached a vanishing-point.

The Vedantic philosophy may be taken as the typical Hindu doctrine. It belongs in its main features to the last three centuries before Christ, but is in some respects earlier, and in some later, than that period. It is earlier in so far as a tradition existed before the actual philosophic doctrines arose on the basis of the Vedas; it is later in so far as for practical purposes the term "Vedantic philosophy" means the body of doctrine contained in the works of commentators of whom the greatest (S'ankara and Ramanuga) lived in the eighth and twelfth centuries after Christ. A critical reader who requires details must con-

sider carefully the relative merits of these two interpreters; they differ considerably, and both claim to give the right interpretation of the original scriptures, so that it is possible to learn from their differences the important fact that early Hindu theories are really indefinite enough to contain the germs of opposite doctrines. One point only will detain us. S'ankara and Ramanuga differ on the question of the relation between the individual self and the cosmic self, atman and Brahman. This difference is rooted in a difference about the nature of Brahman, which for S'ankara is impersonal, for Ramanuga a personal God. The Upanishads make both theories possible by using equivocal language about God or Brahman, and also speaking of the soul sometimes as mounting up through the head to the place of God, sometimes as merely becoming one with universal consciousness. How far either commentator is right, or how far either succeeds in adapting to his own theory the contradictory views, is not here to be considered. The point of interest is that there was clearly no decisive doctrine on the separate existence of individual selves; there was more room for divergences than might seem to be the case from some accounts of Vedantic philosophy.

(iii) The Sâṅkhya doctrine appears at first sight to be a complete antithesis to the Vedantic. In character it represents a scientific rather than a religious type of speculation. Its basis is dualism, the dualism of matter and the self or spirit. Spirit exists as an independent subject, allied with a definite form of matter. To matter belong all objective realities, the outer body, the inner subtle body, sense and intellect. From the Ego, a material substance, come all the parts of man (the elements), the organs of sense, the organs of action and the mind. The manas or mind as a receptive and discriminating faculty belongs to the realm of matter.

The process of sensation is analysed as an impression on the sense-organ which is received by the mind (manas) and given by it to the Ego and then to the intellect (Buddhi). Perception is to be distinguished from sensation as activity from passivity; the manas has passivity and activity, or powers of receiving and of reacting. As the mere presence of an object is not the same as perception, the world of perception must depend on the will to perceive. Unfortunately will, memory, and imagination are not discussed. In this theory we seem to have a doctrine of evolution, in which the whole process is kept in the objective world. Starting from the question —What is Man?—the Sânkhya accepts a dualism of subject and object and with it a pluralism, asserting that the self is not a mere determination of a higher cosmic self, but an independent reality. Apparently this opposition to ultimate unity is based on the nature of feelings; if we were all really (not merely logically) a unity, if the generic idea of man were a substantial unity, then "all would be happy when one was happy, and unhappy when one was unhappy." In this the Sânkhya philosophy anticipated every criticism that has been made on the idea of "cosmic consciousness" and refuted by anticipation the idea that is always deduced from a "World-Soul"—namely, the idea of "sympathy" as implied in sympathetic magic. In brief, the Sânkhya philosophy is the denial that logical categories are substantial or metaphysical realities; all selves are included under this universal idea of self, but not under one Universal Self.

The mystical "higher unity" being now dismissed, our highest terms will be a self or spirit and matter. The evolution of matter passes through the following stages: (*a*) it is at first mere objectivity, the chaos of stuff; (*b*) it becomes intelligent as Buddhi. This is a difficult point

in the doctrine, but the evidence seems to point to Buddhi as the most general form of consciousness, the mere potentiality of mind, perhaps no more than "primary irritability." (*c*) It next becomes individualised, and we have the matter evolved up to the point at which it is the organic structure of a self. Here the process ceases, though we distinguish in that self the differentiation of elements, organs, and mind or sensorium. Whether this is idealism or not is impossible to say; it is a combination of philosophical unity, evolution of life-forms, and critical dualism. It confuses knowledge-values and nature-values.

Clearly this is a doctrine which has taken the individual rather than pure consciousness as its basis, and comes near to modern ideas of the individual as an organism of a certain kind whose self is not merely that organism, nor is his life merely the mechanism which subserves life.

Along with this description of the individual the Sânkhya retains ideas of the purpose of life akin to those of the Vedanta. The end of all existence is the removal of pain and with it pleasure; life is a bondage to things that are transitory, a colossal illusion, and its goal is freedom from ignorance, from passions, and from union with matter. The method of knowledge is by way of sensation, inference, and authority. This involves admitting that knowledge in the sense of science is of use, and revelation is not the only useful knowledge. Knowledge is required to understand the sources of pain. Pain may arise from bodily disorders, mental disorders (desire, anger, envy, separation from what is liked, etc.), other beings (thieves) or gods (cold, heat, thunderbolts). Knowledge of the causes or reasons for these removes blind opposition and brings about resignation. The error of the world is then learned and the wise man has freedom.

(iv) In the two closely allied systems known as Nyaya

and Vaiseshika we find a further development of the scientific element. From this point of view the different systems might be regarded as forming a gradation, the Vedantic being most religious in character, the Sânkhya more inclined to allow independent value to nature, and the Nyaya most of all concerned with "second causes." In consequence of this increased naturalism we find here a new type of inquiry. The Vaiseshika indeed is an atomistic doctrine in its view of matter; but that is not carried out into a materialistic view of man. The human body is composed of elements; the organs of the senses are the physiological structures, eye, ear, etc.; the source of knowledge is the senses. But the self is distinct from body or senses. The self is the knower which has for its instruments the senses, and the Manas. The terms Manas and Buddhi are now used in a limited way. Manas denotes the act of attention or awareness, that which makes sensation more than a physical fact; it also controls the sensuous perception, apparently by determining which sensation shall rise into full consciousness. Buddhi seems to mean no more than intelligent comprehension. The senses supply material to the Manas; the Buddhi makes the work of Manas truly intelligent, being perhaps the conception which saves the perception from remaining blind. Memory is regarded as twofold, passive retention and active recollection; and an elaborate list of associative principles is given, e.g. attention, connexion, repetition, likeness, unlikeness, and eighteen others. The list is crude but shows a distinct attempt to analyse the principles of recall. A still more significant point is the reduction of knowledge to an act in time; as such it passes away. Knowledge is not an eternal possession but rather a function. The self is eternal, but the nature of its existence after death is not described. Dreams are revivals of waking experiences; there is a real world

independent of knowledge, and things are not merely the illusions of a limited self. Yet with all this opposition to spiritualism the formula of the end remains the same; by meditation man acquires freedom. Here, however, this freedom is void of metaphysical dogmas. The doctrine is throughout an answer to the question—What do we know? Its object is to show what we can be. This is the original Vedantic ideal, but now brought down to earth; self-control is the right name for that final state; it is to himself that man comes by wisdom, not to God or to a transcendent self, and in himself he may find peace.

The main points which make this system different from the others amount in sum to an empirical treatment of knowledge. More interest is shown in mental phenomena as opposed to metaphysical aspects of the self. Yet as a whole the doctrine remains idealistic. It asserts a distinction of mind and body; it makes the Manas eternal and capable of preserving the effect of actions, a continuous consciousness; it suggests that some memory of a previous existence survives into this life. Among examples of this recollection it names the infant's "readiness to suck." Here, and perhaps here only, Indian philosophy comes in sight of the problems of instinct. Another gleam of insight appears in the question why, if memory is merely a mode of the Self, remembrance of an acid substance can make the mouth water. A simple question! But to answer it would have been to solve the whole problem of the relation between mind and matter. To call memory a "mode of the Self" and take the Self as abstract was merely to stifle discussion.

(v) In dealing with Hindu beliefs we have been surveying the principal ideas of the Aryan nations as they appear at the conclusion of a long period of development. The old and primitive belief merely asserts the existence of the soul after death; immortality is not distinctly

asserted, the attitude being rather negative in so far as there is clearly a tendency not to think of any final end. As time went on reflection projected a past and a future into the idea of life ; man exists before he is born and will exist after ; the primitive desire for life guides men toward the idea of existence after death, but reflection brings a new element in the form of transmigration as a doctrine of an endless cycle of lives, a ceaseless struggle for release. This gives place to the ideas of absorption, self-realisation in the Eternal Self, or spiritual freedom, which have been noted in the philosophical theories. Upon this point Buddhism said the last word. All the other theories were lineal descendants of animism. The soul or spirit of man is said to have its counterpart or its completion in an Over-Soul of the universe, a Cosmic Self. Buddhism as taught in India seems to have finally given up the idea of a persistent soul. In throwing emphasis on works it did not state that the individual should himself reap the rewards or punishments. It clung to the ideal of insight, freedom from the bonds of ignorance, and ultimately insight into the impermanence of the self with consequent blessedness. It realised what was implicit in the Vedanta, that the future must be conceived impersonally. The idea of an infinite spirit with which man is reunited may obscure this for a time, but ultimately it must become clear that such a solution of the problem does not satisfy the very desire which gave rise to the notion. In thus renouncing speculation Buddhism became a doctrine of self-annihilation without pessimism, content to see in the life of the soul a partial fulfilment of an evolution which as a whole belonged only to mankind.

§ 2. *Egyptian beliefs.*—In the Eastern philosophies there is a persistent bent towards eschatology. The soul comes into prominence as the immortal element, as that which

hereafter will suffer or rejoice eternally. This subject belongs in the main to the study of religion ; it includes details of ritual and descriptions of the journey of the soul after death ; psychology does not extend its borders to include such matters but yet finds in them a completion of its sphere. For the so-called psychological religions rest on direct doctrines of the soul as it is in man, and if there is some unwarrantable projection of the present into the future, there is some attention to the data from which all psychology must spring, namely, the living consciousness.

The fundamental points are naturally very similar in all theories of the soul. The beginning and the end of life are mysteries that confront reflection wherever it begins its work. The mystery of life is more easily overlooked than the mysteries of birth and death ; the miracles of daily experience are accepted without question when the greater crises have long since become insoluble problems. While it might be said that consciousness in its daily acts is more a riddle than events like birth and death, we easily sympathise with the attitude of those who turn away from the analytic study of processes in order to contemplate catastrophes. In the most primitive days there seems to have been but little sense of these crises ; birth and death were not so important either economically or socially ; families grew up and died down with the monotony of seed-time and harvest. As civilisation progressed there was a steady progress in the emphasis which society laid on the importance of birth ; the community either stood in need of men or felt the strain of over-population ; it became in this way self-conscious, anxious to exclude the alien and exalt the true-born, anxious to know its responsibilities. The ethical aspect of this progress is the increasing attention paid to questions of marriage, both as regards fidelity among the married

and the status of the unmarried. We find in the East more than anywhere that continuation of the race rises to such a height of importance as to be a religious obligation. The past and the future seem to be the factors in life that create most interest; the present sinks into insignificance. So, in the sphere of psychology, reflective thought seems to be driven by the pressure of social life toward consideration of the problems of birth and death. When we come to those late ages of which we have records in Egyptian and Indian traditions, consciousness has crystallised its products into creeds and theories. These are both psychology and religion; psychology, because in it men express their interpretation of their own souls; religion, because men come to themselves through others and turn back upon the self only after they have seen it reflected in the natural or social environment.

Reflective consciousness comes first to a recognition that man at death ceases to live the complete life which is earthly existence; he passes to another state in which he lives without the earthly body. This is, in some sense, a separate existence of the soul; and that existence is pictured as bright or gloomy by different nations, or by the same nation at different times. The Greek view, already discussed, is typical: a few remarks on some of the Eastern theories will suffice to show the uniformity and the differences.

In ancient Egypt the continuation of the race seems to have been regarded as a stringent obligation. With this social or religious obligation there goes a feeling of reverence for continuity as such; the ancestors live in the children, the descendants perpetuate the memory of the ancestors, the body is preserved for long periods of time from corruption; in short, the desire of going on and not stopping is developed to an extraordinary pitch. The counterpart of these actions, the object of the formed

ritual, is not the individual as he is in life but as he is in death. No nation appears to have worshipped the dead: the operation is unthinkable; it is the living self as it survives after death which is the object of ritual.

It is therefore not irrational for ritual to develop in both directions, viz. as a worship of those who have lived and as a mystic rite in which the living prepare for the state after death. Ancestor worship is always more or less consciously performed with a reference to the worshipper's own soul, and is psychologically a factor in producing a belief in one's own soul. In Egypt the duality of outer and inner self was fully acknowledged. The permanent element in the individual is the spirit that dwells in him, the Ka or ghost or "genius." Ka means "image," and therefore corresponds to the "imago," εἴδωλον or "ghost" of other lands. This "inner man" is in no sense immaterial; it has its own body and can eat and drink; when disembodied it can affect the living, and these spiritual beings are active as apparitions or as "possessions." As compared with the methods of Hippocrates Egyptian medicine seems to have remained spiritualistic to a late date. The object of diagnosis was to discover the nature and name of the evil spirit causing the disease. Even in the second century A.D. the body was considered to consist of thirty-six principal parts, over each of which presided a specific "ghost" which might suck the marrow, break the bones, destroy the flesh, or devour the entrails. In addition to the spirits in the individuals there are also spirits which mediate between man and the gods, and some spirits act as messengers of the gods (angels). In the life hereafter all that death takes from a man is restored to him. Soul and genius and shadow reunite with the purified body; the powers of thought and action are restored. In brief, a man is made happy by attaining all

that he can be expected to want; he has life again, but a better life. Moreover, there is no limit of place; the dead can dwell where he pleases and undergo any transformation that the Ka desires. The Ka is the most typical conception of the spiritual self in the Egyptian writings. Others existed, either as substitutes at different times or as additional aspects: thus the human-headed hawk, the Ba, is a symbol of the soul considered merely as consciousness; the fan represents it as vital breath: the Khaibit, shade or shadow, is another mode of description, while the conscience is also regarded as something distinct, and is said to have its seat in the heart. It is the heart that is weighed (against a feather) in the hour of judgment after death.

The transmigration (metempsychosis) theory is not found in Egyptian works; there is no suggestion of a cycle of births through which expiation or purification is achieved. A return to bodily forms (metensomatosis) is, however, clearly recognised. The Ba can "accomplish transformations"; the dead, if he "knew this adjuration on earth or if this chapter be put in writing on his coffin, shall go forth by day in all the forms he wishes."

§ 3. *Persian beliefs.*—The beliefs recorded in the Avesta diverge from the Egyptian and approximate more closely to the Indian theories. In the religious doctrine the assertion of one supreme being, Ahuramazda (Ormuzd), is qualified by the recognition of an opposing principle, this dualism resulting probably from the consciousness of inner conflict in the individual soul. The Supreme Being is one and yet divided against itself, as man may be divided against himself without being two men. The fact that the two principles are called the "good mind" and the "bad mind" show that the solution of cosmic

problems (matter, evil) were derivative from psychological observations. Similarly, the plurality of divine powers (the angels) are derivative from the powers or qualities of the soul. It may be said that religious beliefs are always projections of self-consciousness; but even so there is a difference, historically, between a nature-religion and a soul-religion; for the former takes the objective world as its centre of interest, while the latter advances from the subjective point of view without the mediation of nature. The character is consequently different and the difference is brought out in later developments. Persian and Hebrew thought were closely akin, so that a movement from one to the other was always easy; but if this explains the way in which later periods of intense subjective feeling supplemented or opposed Hebrew traditions by employing Persian ideas, it remains true that the link is the common psychological character rather than affinities in form or language.

The fundamental question is—What happens when a man shall give up his soul in the world of existence? From the answer to this we gather that the fate of the soul depends on its character. The good soul remains three nights seated by the head of the dead man; on the morning of the fourth day it seems to be in a place of fairest plants and scents, inhaling a sweet-scented wind; there comes to it a maiden of exceeding great beauty which is the man's conscience. Then the soul takes its way, first to the Good-Thought Paradise, then to the Good-Word Paradise, then to the Good-Deed Paradise, and so finally to endless Light. The fate of the evil soul is the reverse, ending in eternal darkness.

The ethical interest is here very marked. The soul is regarded as an independent entity with a life after death; it is (in some accounts) said to be weighed in the balances as part of its trial; when the righteous soul has crossed

the bridge into the next world it comes finally into the presence of the highest God.

Corresponding to the Egyptian Ka is the Persian Fravashi, the permanent spiritual element in man. The superhuman spiritual beings are also called Fravashis, apparently because God himself and every manifestation of God has its inner reality and outer form. The disembodied Fravashi is the object of worship, and thus a hierarchy arises above man, from spirits of the dead through the spirits in the universe (angels) up to the one Supreme God. The purity of this doctrine and its ethical character gave it wide influence, and the effects of Persian traditions can be traced in the Hebrew writings and those religious doctrines which inherit Hebrew traditions.

§ 4. *Later beliefs derived from Eastern sources.*—Persia was the original home of the worship of Mithra. Western Mithraism, the great rival of Christianity, was a complex religion in which the worship of a God of Light, who is met first in the Vedas and then in the Avesta, was united with Chaldæan magic, Egyptian rituals, and Greek theories of transmigration. The organisation of this religion, its ritual and its priesthood, does not concern us, but its astrological character and its psychological standpoint call for notice both as signs of the time and as permanent factors in the religious life of the West. The last three centuries before Christ were a period of synthesis. History has no explanation of the changes in the spiritual life of nations; no one can say definitely why one age seems predominantly objective and another subjective: or why the old gods perish and there arise new forms of worship penetrated with a new spirit. The temptation to find in psychology a clear reason for this or that type of religion must be resisted so long as nothing results except tautology. No one can doubt that a religion is primarily

psychological in its origin; but so is all the work of the mind to some degree. The tacit assumption underlying the psychological analysis of religious belief is that religion, unlike science, will ultimately yield nothing but psychological processes; the subjective factors will prove the only residuum, and the material will either be dissipated or turn out to be experiences of a non-religious character. The forms of religion which spring from mysticism are most open to such a destructive analysis; for they either take an emotion as the criterion of truth or refine the objective powers into values. In the former case, when emotions are clearly the starting-point and the objective of a religion, psychological analysis has free scope and may reduce the phenomena to its own categories. In the latter case there is much greater difficulty. A religion which evolves from a naturalistic stage into a spiritualistic implies a corresponding development on the part of its adherents from consciousness of things to consciousness of values. The psychological reduction fails at this point; the illusions of desire or hope or fear are no longer separated from the inner states and put away into obscure and far-off places; hell and heaven are only discord and peace in the soul; men reject every dogma that cannot justify itself before the tribunal of their own experience, and so finally religious experience stands forth as one of the data which the psychologist must recognise.

The idea of values is not a discovery of modern psychology. It was expressed in the simple statement made by Aristotle that things may be chosen for their own sake. But the significance of the idea was latent for many generations; it is always much easier to grasp a value which is relative than a value which is absolute. Thus a science which tends to preserve life has a value which is obvious; exercise is chosen for the sake of health, but health is

chosen for its own sake. Similarly, if a religious system makes for political strength or national prosperity it is easily "explained." In many cases the idea of transmigration was fostered by rulers because it tended to make men courageous. But the idea of eternal life is only a comfort to those who value life; and we come back to an inexplicable and ultimate formula, life for life's sake. Similarly, it seems true that the basis of a religion may be its own immediate value.

The case in point is the Mithraic religion as it existed from about 300 B.C. onwards. This is distinctively a synthesis of factors, each of which had independent value, making up a whole found at the time to have value in an exceptional sense. It entered into conflict with Christianity equipped with almost all the ethical and spiritual values which made Christianity ultimately victorious in the West. It is therefore an exceptional phenomenon for two distinct reasons. On the one hand, it represents a sphere of values acceptable to many diverse nations; what it included must have been singularly universal in its character to be so widely acceptable. In other words, it must have been to an unusual degree a mirror of the human mind. Conversely, it is likely that the ideas of the soul and of man which survived into its doctrine are permanent factors of human belief. It is of interest, therefore, to see first what ideas of the soul were contained in Mithraism as beliefs; then to consider what psychological elements are mirrored in those beliefs.

The fundamental belief seems to have been immortality. This implies a severance of soul from body; for the body is mortal. From that follows the idea of spiritual purity; the activities of the soul are distinct from those of the body, and the life of the soul is ultimately character. At this point the Greek emphasis on knowledge is conspicuous by its absence; the Eastern valuation of feeling

takes its place, and we have a religion free from philosophic criticism. The feeling-element thus made prominent is, however, an element common to philosophy and to religion, namely, the feeling of unity either as desire for unity or consciousness of unity attained. These states of feeling are interchangeable, and the soul is consequently regarded as naturally or ultimately one but yet in life often divided against itself. It requires both a process and an agency to restore the desired unity, and these are found in ritual and in a mediator who can bring about the reconciliation of the imperfect with perfection. The mediator is a spiritual power, Mithra, as a degree of spirituality standing between man and the highest spirit.

The significant feature of this doctrine is the emphasis laid on the idea of spiritual as opposed to material values. There is at last a recognition of the fact that God must be a spirit and must be worshipped in spirit. But the doctrine is far from being purified of all extraneous elements. It comprehended dæmonology and confused the inner impulses with outer forces. It was not far from the idea of a material union with the highest Being, expressed in the ritual by admitting the devotee to a sacrament in which the elements, bread with water and wine, were the means by which the nature of the god was transferred to the individual. In this there is evident trace of the older belief in a material union with the spirits of the dead. From obscure origins, which may have been cannibal at one time, a progressive refinement led to the idea of union with the dead through taking part in a sacrificial feast, and then finally to a less crude ritual whose object was a sense of unity with the god awakened by symbolic "elements." Finally, Mithraism diverged from the Indian line of development by absorbing an astrological ritual which was a defect in so far as it introduced objectivity into the spiritual forms of worship. The soul, instead of merely

realising higher degrees of purity, is represented as ascending the path that leads to the sun or descending from the sun to a corporeal life.

In spite of considerable ethical value it is obvious that Mithraism subscribed to beliefs about the soul that were useless either for scientific or religious purposes. It shows these defects in close analogy with other doctrines current during this period, and may be compared with the religion which is represented in the Hermetic Writings. The following epitome will suffice to show the nature of these writings: "Souls are made from the breath of God and conscious fire. Rebellious souls are embodied. At death souls return to their proper region in the sixty spaces. In the sixth to fifth century, metempsychosis allots souls to heaven, kings, men, or animals. In the fourth century, souls are judged and weighed by their chief daimon, the good live in peace, the evil are driven into storm and outer darkness. The guardian angels of men fix their dispositions, apparently acting through them. Daimons bring evil on man, driving him to robbery or deceit. But the Reason or logos of man, a fifth part of him derived from the Æther, is above the power of daimons. And if a ray of God enter man it keeps daimons off for ever. Evil is not abolished by God, but is provided against by the sense and intelligence given to man. Troubles were brought on man by a mighty earth spirit. Mystic rapture was recognised as giving a share of the Divine Sense."

These ideas are not of sufficient importance to require further expansion or comment, but deserve mention as showing one phase of the union gradually effected between Eastern and Western speculation. India, Persia, Egypt, and Greece are all represented in this eclectic fusion. Jewish influence is apparently absent in this compilation of "scriptures," and the "Writings" belong to a period

which is in this respect pre-Alexandrian. Jew and Greek met at Alexandria and produced a different combination of traditions; what influence was exerted by this pre-Alexandrian movement will be seen, if anywhere, in the works of Plutarch.

PART II

CHAPTER I

THE HEBREW TRADITION

§ 1. It has been well said that "Scripture has no intention of giving a physiology of man; for this reason biblical psychology is not a natural philosophy of the soul of man." The fact is that the Scriptures present only one side of human life, that which concerns the idea of salvation; for the rest the treatment of man is incidental and the language employed is popular. There is no use therefore in attempting to shape these scattered remarks into a definite theory; scientific results are not to be found, and the theosophic aspects, if any, will not be considered. Yet because of its peculiar tone and its great influence on later writings, chiefly through Jewish Alexandrian influences, some account of the Hebrew view of the soul must be given.

§ 2. The body is uniformly regarded as that in which the soul exists. At times it is called a house, a tenement of clay; or it is a sheath. This expresses the relation of soul to body and agrees with the idea that life is a temporary condition; the exact nature of the relation is not explained. The soul is simply embodied life and no dualism seems to be implied; the soul is not imprisoned in the body, and transmigration is not regarded as possible. The account of man's creation in Genesis II. seems to indicate a belief that soul and body are a unity; when this is contradicted we have either uncritical metaphors or

later Greek influences. Metaphor abounds whenever the soul is to be described; spirit and air, life and wind are commonly connected; while breath is associated with fire and so with animal life. The relation of the soul to vitality and vital processes is recognised; from this point of view soul and blood are commonly identified. There is no idea of a nervous system, but brain and marrow are mentioned and connected with sensation. As soul and blood are closely allied, the heart is naturally given the most important place: it is concerned with the bodily life, desire, will, sensation, and feeling. Whether the reference is to moral or intellectual life, to thoughts or purposes, it is the heart that is most frequently mentioned. The term seems, however, to have had a wide significance and to have stood for the whole of the inner parts of the chest. The Hebrew was most interested in feeling, and his experiences were clearly of a type more common in the East than the West. For reasons not easy to define, the Eastern mind seems always strongly conscious of the organic states that accompany psychic activity. In the East the body is more easily affected and a feeling has more reverberation through the system. Consequently Eastern writers dwell more insistently on inner organic states: the heart understands, obeys, and rejoices; the organs below the diaphragm are said to feel love or sympathy; the liver is moved in the yearning of affection.

§ 3. Spirit is distinct from soul. The spirit is not associated with the blood: it is superior to the soul which occupies a middle position between body and spirit. In the Old Testament the relation of body, soul, and spirit is not clear. The dualism that opposes the spiritual to the natural (body and soul) belongs to the New Testament; the Old Testament seems to imply a dualism of

a different type, the crude opposition of flesh to spirit, soul or heart. This is an ethical dualism for which no strictly psychological explanation is given. Dreams are treated after the manner of all early animistic theories: they are activities of the soul, and follow the nature or bent of the individual's waking life. The law recognises a degree of moral quality in dreams because of the continuity of life which makes the dreams of the good and bad differ according as the persons differ in the waking life. In the dream-state man is more vividly conscious of his inner nature and may therefore attain a recognition of truths that are not so clearly understood in the waking life. The peculiarly objective character of these visions suggests the idea that in them God directly speaks to man and some of the visions are described as revelations, God's direct communication with the soul. The latter are states of ecstasy and may occur when the subject is not asleep. There is thus a complex division: dreams may be either physical and illusory, false dreams, or psychic and genuine experiences of the self in a state of release from bodily influences; revelations are communications to the soul which may be received during waking ecstasy or the analogous ecstasy of deep sleep.

It is difficult to understand exactly what the Hebrews believed about ecstasy. The commentators are also frequently uncertain in their explanations; for example, some speak of a progressive development in the nature of these divine communications, but leave the reader in doubt as to whether there has been a real change in the nature of man or only an increase in knowledge by which cases of ecstasy have been proved to be mental derangements. There are two extreme views: one is the scientific view that all the recorded instances are cases of mental excitement due to natural causes; the other is the theosophic view more or less vaguely attempting to give a

supernatural origin to the visions of ecstasy. For psychology the point of interest is the actual experience of the individuals; and there is no inherent difficulty in the supposition that mental exaltation is more easily attained by some than by others, and even at some periods of the world than at others. The writers of the books of the Bible represent many stages of civilisation and differ in their points of view. They seem, however, to be agreed on the difference between morbid imagination and real insight. Diseases of the mind, such as the melancholy of Saul, are clearly recognised and described; but there is a strong tendency to allow the character of the result to influence judgment as to the cause. This error is shown in allowing the truth and falsity of visions to be a criterion of their origin; whether a dream comes true or not is a point that cannot be considered in a discussion of its origin. Modern views on hysteria and "religious melancholy" make it difficult to say what was the real nature of ecstasy; for science goes too far when it takes the mystic's account of his experiences as a sort of unintentional diagnosis, while some of the accounts contain elements which may fairly be regarded as "symptoms." On the whole it seems fair to leave these more obscure points of subjective psychology out of our consideration, and let them be understood as best they may through the analogy of later records. It is to the statements of Philo or Plotinus that the inquirer must turn for guidance, and with that type of philosophy which "would clip an angel's wings" must be united the records of great thinkers and poets who have left in later times testimony to the peculiar nature of strong mental exaltation. One point is worthy of mention: states of ecstasy produced by external agency, drugs, and the like, were well known to the ancient writers and were sharply distinguished from the true states of inspiration. Whether they were

equally alive to the psychic effects of fasting or long meditation, and whether they appreciated the natural effects of the severe preparation which the body was sometimes made to undergo, may be doubted; an external agency would be more quickly recognised than such an internal source of abnormal mental intensity.

Note

For the rationalist view of ecstasy the reader may consult Lecky, "History of European Morals," II, 116: to present a view strongly biased toward the theosophic explanation and written very much *ad fideles* I quote Delitzsch, "Biblical Psychology," 424: "The true prophets, however, are distinguished from the false, by the fact that there are no special pathological phenomena under which the visionary state comes on; further, by the fact that they do not, by any influence upon themselves, throw themselves into this state, and that generally in order to be able to behold divine visions, they are not first thrown into this state by way of preparation; but the continuity of their spirit's life is suddenly broken through by the extraordinary operation of God, as when Ezekiel, sitting before the elders of the exiles, is seized by the hand of Jehovah, and snatched away to Jerusalem, and not till after long vision is placed back by the spirit of God which has taken him away, into the external and conscious reality of his situation (Ezek. viii. 1–3, comp. xi. 24); and it is the awe-inspiring, overpowering impression of the vision itself which throws them upon their face (Ezek. i. 28, iii. 23, xiii. 3), that they are, as it were, sunken in deep sleep (Dan. viii. 18, x. 9, comp. Zech. iv. 1), and lie upon the ground, as if, as far as the outer man was concerned, they were dead (Dan. x. 8; Apoc. i. 17). Their ecstatic state, moreover, is distinguished from the forced false one (*παρέκστασις*), by the fact that they remember what has been given them to see, hear, and speak in the ecstasy: their consciousness therefore suffers no dislocation in the withdrawal; it does not happen to them as to the Cumæan Sibyl, who, when the inspiration left her, had no memory of what had been spoken. But in all cases the ecstatic vision never comes

on without the life of the prophet withdrawing itself from without, inwardly to the innermost ground of the spirit."

The subject will be treated further in later writers down to Augustine, who defines the state of ecstasy as " alienatio mentis a sensibus." This was at least the essence of all types of ecstasy.

CHAPTER II

THE UNION OF GREEK AND HEBREW THEORIES

§ 1. The beliefs which we found recorded in the Old Testament remained for a long period the heritage of generations. But just as Greek ideas changed during the age of expansion under Alexander, so the traditions of the Jews underwent considerable transformation in the very efforts of their champions to preserve them intact.

The first signs of change are seen in those writings which can be assigned to the beginning of the third century (300–250 B.C.). The traditions of the Old Testament belong to the Jews of Palestine. The community called the Jews of Alexandria was a society sprung from the same stock, but deeply affected by the Hellenic life and culture with which they were in constant contact. The Jew has a singular vitality, and the history which is too briefly narrated in these pages exhibited the strength and character of that vitality. From first to last, there was no attempt to repudiate Hellenic thought; Judaism neither sank beneath the waves of Hellenism nor strove to keep out every drop of the encroaching waters. On the contrary, we find among the Alexandrian Jews that type of character which ultimately survives all dangers: the type that bends without breaking, absorbs without loss of individuality.

The Egyptian Jews appear to have formed a mixed society mainly Hellenic in manners and language, but still

thoroughly Jewish in temper. For this community the Greek version of the Septuagint was made somewhere about the year 250 B.C. Into the disputes on the nature and authorship of this translation, the version of the Septuagint, there is no need to enter: it is sufficient to remark that it was a version not wholly free from innovations. Even if there were no self-willed theorists among the translators and no direct intention to give the Scriptures a Stoic or Platonic colouring, there must still have been many an instance when the change from Hebrew to Greek words involved a change of atmosphere that amounted to change of doctrine. To the inevitable use of Greek scientific terms for the Hebrew originals can be traced the beginning of many allegories and many disputes. Thus the Septuagint forms a literary landmark of first importance, and next to it may be ranked the Book of Wisdom ascribed to Solomon. It appears from this work that Greek thought had struck root to an extent that some regarded as alarming; the Stoic fatalism and Epicurean advice which coloured the Words of the Preacher (Ecclesiastes) were an offence to the stricter sect and called forth an answer in the Book of Wisdom. Of the date of this book nothing is accurately known; it falls somewhere between 263 B.C. and 30 A.D.; its author was not Solomon but a Greek Jew, and here it is taken as representing a stage of thought prior to the work of Philo. The points which are of interest for our present purpose may be briefly stated thus. The author appreciates to the full the exact requirement of his age: Judaism is inferior in some respects to Greek philosophy: it is none the less the one true religion, and only requires to be stated rightly and in language that can appeal to minds trained in Greek ways of thought. To meet this need it was necessary to find some common point at which Greek and Hebrew thought could unite. This

seemed to be Wisdom. On the one hand the doctrines of matter, of the ideas, of the body as a hindrance and of wisdom as a cosmic power, could be drawn from Platonic and Stoic sources. On the other hand, from Sophia of the Greeks to the Wisdom of the Psalmist was an easy step for the uncritical mind of an enthusiastic Hebrew. Thus we obtain a type of the works that were to be only too common: a Greek substructure is covered with a Hebrew theory; wisdom, having run its course on earth, rises up to the heavens and becomes timeless, the coeval assistant of God, the source of all things good and of all the inner life of man whether it be inspired knowledge or the science of things earthly. A note altogether foreign to the Old Testament is struck in the repeated references to individual immortality; the idea is still in its infancy and the nature of this immortal life is vaguely outlined; but that man by eternal Wisdom attains eternal life seems certain to this writer.

The Jewish-Alexandrian school found its completest expression in Philo. The few traces of the development between 250 B.C. and Philo's lifetime show that he was part of an evolution that was nothing less than a national movement. The Jew was awake within the Hellenic sphere of influence, and here, as everywhere, he intended to proselytise.

§ 2. The work of Philo is not an isolated phenomenon: it is part of an intellectual movement of incalculable importance. In spite of the lofty aspirations of Plato and the equally lofty resignation of the Stoic, the literature of the West lacked something: no Greek could have named the deficiency of the Phædo or put his finger on the weak spot in the armour of Chrysippus; it required a temper of a different make; it required a people whose God was jealous and whose faith was a flaming fire; in a word,

the Greek had thought about himself until he was indifferent to all things and desperately sceptical; the Hebrew had still the fire of passion and the impetuosity of faith; with these he made life interesting and fused in one molten mass the attractive elements of every known doctrine. The result was pre-eminently unintelligible, but it was inspired. The strength of the new influence lay exactly in that strange fervour which must have seemed to the Greek a form of madness. And it was not only that fervour made all things possible; there remained the actual fact that psychology is lived as well as described; personal experiences go to make its history; to the mind that will strive and believe new worlds may be opened up, and if we find little enough in these writers on the senses or attention or such subjects, they are a mine of information on the life of the spirit. And here perhaps someone will ask, Is there a spirit? is this more than words? The answer is in this record: a history of psychology is a history of two distinct things: first, the observation made by men upon one another; secondly, the observations which now and again the more powerful minds are able to make upon themselves. For many a long century after Philo we shall have to record the progress of psychology in both senses. It would be unwise to begin with any prejudices against those subjective data which are incapable of proof; they may seem at last to be the axioms of all psychology.

The works of Philo are lighted throughout by the strong reflection of personal aims and feelings. His peculiar method of exposition would be irritating beyond endurance if the reader were not continually sustained by a sense of the passionate earnestness which lies behind it and the ceaseless striving after an expression of deep feeling which pervades every page. This temper might be called spiritual fervour; but the term is inadequate, for

religion and philosophy were combined in Philo and each limits the other. If we lay emphasis on the religious side, the scientific element in his work seems to be neglected; if the term "philosophy" is used, the eccentricities of his allegorical explanation of Scripture seems to make the title ridiculous. It will be better, therefore, to avoid any attempt at a brief definition and leave Philo to state his aims and methods in his own language.

The first and leading feature of Philo's work is his religious interest. For him life is the restoration of the fallen soul: his doctrine is a theory of regeneration through wisdom. In his comment on the phrase "all flesh had corrupted its way upon earth," he writes thus: "All flesh corrupted the perfect way of the everlasting and incorruptible being which conducts to God: and know that this way is wisdom: for the mind being guided by wisdom, while the road is straight and level and easy, proceeds along it to the end: and the end of this road is the knowledge and understanding of God." Wisdom is the royal road by which man can return to perfection; in search of wisdom man should penetrate to the very boundaries of the world; for it is of more value than any merchandise. But it is in the world of thought that this exploration must be made, and in his appeal to his own soul to undertake this search Philo sums up the scope of his work: "Do thou then, O my soul, travel through the land and through man, bringing, if you think fit, each individual man to a judgment of the things which concern him: as for instance, what the body is and under what influences, whether active or passive, it co-operates with the mind: what the external sense is and in what manner that assists the dominant mind: what speech is and of what it becomes the interpreter or has to contribute to virtue; what are pleasure and desire: what are pain and fear: and what art is capable of supplying a remedy

for these things by the aid of which a man, when infected with these feelings, may easily escape or else, perhaps, may never be infected at all: what folly is: what intemperance: what committing injustice: what the whole multitude of other desires which it is the nature of all destructive vice to engender, and also what are the means by which they can be averted."

In addition to these statements of the purpose and the scope of his work we have also a defence of method: in commenting on the Confusion of Languages, Philo says: "But they who follow only what is plain and easy think that what is here intended to be recorded is the origin of the languages of the Greeks and Barbarians, whom, without blaming them (for perhaps they also put a correct interpretation on the transaction), I would exhort not to be content with stopping at this point, but to proceed onward, to look at the passage in a figurative way, considering that the mere words of the Scriptures are, as it were, the shadows of bodies, and that the meanings which are apparent to investigation beneath them are the right things to be pondered upon." This is only one of many explicit defences of the method. Philo is well aware that some will laugh at his method: perhaps more have laughed than he expected, but his method is not a mere form of exposition: it is one phase of the belief in a dual world. For the senses give us the outward show, the letter, but the mind penetrates to the inner meaning, the spirit that gives life. In all history there has been a mind at work: like is known by like and therefore this hidden truth can only be reached by mind. The significance of this will be more apparent later. For the present it is enough to indicate the general character of the work; we will now proceed to collect Philo's utterances on the general subject of Anthropology.

§ 3. Regarding man from without we see that he occupies a middle position: he is in some respects akin to the animals, in others to such superior beings as stars or angels. His life, too, is divided between the life of the flesh and the life of the spirit, or between sense and reason. The explanation of this dual nature is to be found in the story of creation; for there we learn that man was created, as to his body, from the earth, and as to his soul, by God himself. Thus for Philo man is dual by nature primarily in the sense of the Hebrew theory which makes man two natures, united in one being. This line of thought makes the soul part of the Divine nature, the breath of God. Greek theories also speak of the Divine in man, and Philo continually employs both lines of thought, making the breath of God and the rational soul identical. From the Hebrew point of view the relation of soul to body is purely external: the soul is not dependent upon the physical organism, nor its product: it is a separate entity. This theory finds an ally in Pythagorism, hence Philo's further assertion that the air is full of spirits, some of which descend into human bodies, while others scorn to degrade themselves; which is a fine flight of fancy uniting three distinct ideas, namely, that of transmigration, of dæmons, and of angels who are ministers of God. The proof of these beings is deductive: every element has its occupants, and therefore the air is occupied by spirits: the argument is not convincing in any case, and seems to overlook the previous statement that the birds occupied this region! But we shall not waste time seeking for consistency in Philo.

In this account of creation we are told that God created the animals in order of rank from the least sensitive, the fish, up to the highest, man. The distinguishing mark of the animate is sensation: this distinguishes animate from inanimate and also higher and lower classes of animate

creatures. Taken as a principle of life, soul is thus common to all creatures: it has blood for its essence; it is transmitted from one generation to another. While the spirit is peculiar to man, the soul is a universal natural principle. From this point Philo develops the Stoic aspect of his doctrine. All things that exist have power of some kind: at its lowest level this is the power of self-conservation, called Habit, which is found in motionless objects such as stones. The next degree is the power of growth, which is a higher form of self-conservation, found in plants, for example. The third level is that of soul-life where we find perception, representation of ideas, and impulse. The common element in this scale is spirit in the sense of air. A vague scientific notion underlies this idea: when the lowest form of being is described as a "spirit going forth from the centre to the periphery and returning upon itself," we can only understand this as a doctrine of material cohesion, Stoic in its origin. Man, as last created, sums up all these forms: he has the various forms in his bones (analogous to the rocks of the earth), his hair and nails (analogous to the plants), and in the sensitive soul. Man is thus a microcosm: he has a material organism illuminated by the mind just as the macrocosm is a vast organism illuminated by the sun. The study of man and the study of the universe can be conducted on parallel lines, and to some extent the knowledge of man is a knowledge of God.

§ 4. Of detailed physiology we find no trace in Philo; a casual reference makes it clear that he had no interest in the question whether the intellect was located in "soul, membrane, or the heart." The general tendency to regard the head as the main fountain of intellect is due to the fact that the organs of sight are located in the head: for the rest, Plato's "Timæus" is clearly the accepted

manual of physiology. From the same source comes the idea that man is regulated by the universal laws of motion, though Philo gives this a biblical character by making the number seven express the law and connecting it with the Book of Genesis. Turning from structure to function we find a number of statements drawn from different sources and dictated by different standpoints. The soul is divided into two parts, rational and irrational. The irrational soul has seven parts—the five senses, the organ of speech, and the reproductive power. Sense is at first an inherent power of habit: at this stage it is said to be in a state of tranquillity. The object puts the sense in motion, e.g. colour sets in motion the sense of sight. In this way Philo restates the distinction of passivity and activity in sensation. The question then arises, What is the relation of the mind to the senses? The activity which the object arouses is not within our control: the outer sense is not subject to the will, and, in fact, hardly belongs to us: it is given to us only as being with us. There is, however, an inner sense which is closely allied with mind: the complete activity of the senses is a combination of both the senses in the act of perception. For reasons which are ultimately ethical, Philo here makes a distinction of considerable importance. He speaks frequently of the mind as irrigating the senses: it pours itself into the holes or channels of the senses and makes them fruitful. Thus intentional and unintentional actions, e.g. seeing and looking, can be distinguished. Though not apparently interested in the psychological question, Philo does in this way distinctly indicate the nature and function of innervation in the sense in which that term can be used to mean a control of animal spirits. The senses, he says, cannot be taught; they are in themselves neither good nor bad: for the moral life they are purely instruments. Regarded as instruments of knowledge the senses are inlets. Per-

ception begins in the process by which something is put into the mind (αἴσθησις=εἴσθεσις), the mind cannot know unless the material is thus furnished, but at the same time the material in itself is not knowledge: that which is inserted makes an impression on the mind as the seal does on the wax: the mind preserves this impression until forgetfulness smooths off its edges or erases it.

§ 5. The first result of this sense-impression is an affection or appetite, which is the first motion of the soul. This is apparently the limit of the animal's life: the irrational creatures stay at this level; all their motions and changes are involuntary; they are, in short, purely passive and automatic. Sense and feeling and passive imagination include the entire psychic life of all creatures below the level of man.

Man is an animal to whom superior faculties have been granted. As an animal he lives the life which we have just described. To the senses belong pleasures which are, generically, motions: all pleasure is of the body and is hated by God. As man can be regarded from two points of view according as emphasis is laid on body or mind, so life may be regarded as developing in two directions. The downward movement is that which is outer, away from the inner light to outer darkness, away from reason to sense; the upward movement is the reverse. Philo sums up the condemnation of pleasure in a phrase: "When that which is the better, namely, the mind, is united to that which is the worse, namely, the external sensation, it is then dissolved into the nature of flesh, which is worse, and into outward sensations, which is the cause of the passions." This sentence is the meeting point of many contrasts: the senses are darkness, plurality, dissipation; the mind is light, unity, concentration. All the Platonic dislike of ignorance, the Stoic dislike of excitement that

destroys reserve, the Eastern dread of unbridled passion, are concentrated in this sentence. The senses now stand condemned for three reasons. They are passive and inferior; they give no knowledge; they belong to that body which is our burden and may become the occasion of our ruin.

It is not possible to go far in a description of Philo's psychology without introducing the ethical values with which he confuses his treatment. The confusion is increased by the fact that the ethical valuation is itself twofold; for we may speak of the senses as sources of vice and so evil; or think of them as the means by which man learns about the world and so comes through nature to God; from this point of view we find them good in different degrees. Since Philo expressly says the senses are in themselves neutral, this distinction of uses involves no real contradiction. The neutrality is carried to an extreme: the senses are said to present bodies as they are, without deceit; the senses of the wise man are good, of the fool, bad; memory is good or bad according as it retains the good or the bad. But considered as instruments the senses have relative values and sight ranks first. The three lowest are taste, smell, and touch; hearing and sight are to some degree philosophical, and of these sight is far superior. It is an exact image of the soul, for the eyes show every change of thought and feeling; by the eyes we know light: the eyes can survey all the earth; they can rise up to the heavens and raise our minds to the creator of all things.

With the subject of light we broach a theme which is an inexhaustible joy to Philo. In light he finds the objective emblem of mind and thought and God. "As in the body the sight is the most important faculty, and in the universe the nature of light is the most pre-eminent thing, in the same manner the part of us which is entitled

to the highest rank is the mind." This style of speech is repeated again and again ; we will let this specimen suffice and state the doctrine of intellect without further embellishments.

Sense by itself is darkness : the mind is the light of man. The essence of mind is distinct : it is imperishable and it alone has freedom. Man alone has a voluntary self-moving intellect, and therefore he alone is free and responsible. As it controls itself under action, mind can, at will, go forth to the outer senses or withdraw into itself ; from this follows the conclusion that thought and perception are in inverse ratio. In meditation we withdraw from the outer world. The nature of the intellect is variously described : it is an impression of the Divine nature, or a ray of Divine light, or a fragment of the Divine Being. Philo says nothing of the differences implied in these phrases : for him they all mean one and the same thing.

§ 6. The language of Philo is variable and inaccurate ; there is, however, little reason to doubt his meaning. The first point to notice is that Philo admits no scientific knowledge of mind. In this he differs from the main trend of Greek thought : however much the Greeks exalted reason or believed that the world of sense and the world of reason were distinct, they never advanced to the mystic standpoint of Philo, which practically makes man the vehicle of a supernatural consciousness. This position requires a disembodied reason which is, finally, a personal God : the Greek understood the meaning of universal law and universal reason, but the idea of a superhuman being in immediate contact with man was foreign to their nature. In brief, Greek thought moved between the opposite poles of scepticism and Pantheism. Hebrew thought tended to immanence without Pantheism ; the attempt to maintain this position is itself a product of

psychological conditions; the desire for a personal relation with a Divine Personality is the property of a distinct type of mind: it indicates a temper wholly distinct from that which leads to extreme rationalism; it belongs to the man who sets pity before pride, self-abasement before high-mindedness, feeling before thought. Our first duty, therefore, is to study the character of Philo, for this is more important than his scattered attempts to condense his ideas into words. He says: "I am not ashamed to relate what has happened to me myself which I know from having experienced it ten thousand times. Sometimes when I have desired to come to my usual employment of writing on the doctrines of philosophy, though I have known accurately what it was proper to set down, I have found my mind barren and unproductive and have been completely unsuccessful in my object, being indignant at my mind for the uncertainty and vanity of its opinions and filled with amazement at the power of the Living God, by whom the womb of the soul is at times opened and at times closed up; and sometimes when I come to my work empty, I have suddenly become full, ideas being in an invisible manner showered upon me and implanted in me from on high; so that through the influence of Divine Inspiration I have become greatly excited, and have known neither the place in which I was nor those who were present, nor myself, nor what I was saying, nor what I was writing; for then I have been conscious of a richness of interpretation and enjoyment of light, a most penetrating sight, a most manifest energy in all that was to be done, having such an effect on my mind as the clearest ocular demonstration would have on the eyes." This personal experience is made the ground of a definite instruction when he says: "Therefore if any desire comes upon thee, O soul, to be the inheritor of the good things of God, leave not only thy

country, the body, and thy kindred, the outward sense, and thy father's house, that is speech, but also flee from thyself and depart out of thyself; being driven to frenzy and inspired by some prophetic inspiration. For while the mind is in a state of enthusiastic inspiration and while it is no longer mistress of itself but is agitated and thrown into frenzy by heavenly love and drawn upwards to that object, truth, removing all impediments out of its way and making everything before it plain that so it might advance by a level and easy road, its destiny is to inherit the things of God."

In these two passages we have sufficient indication of a new view of knowledge: for real knowledge the mind must be the passive recipient of a Divine Illumination: wisdom is the light that lighteth, not every man, but every man that has been purified, and this is a light that knows itself. God has given every man an impulse towards salvation; this is primarily a purification from all the life of the senses: man departs from that in so far as he can abandon the belief in himself as capable of all knowledge; he comes through the life of the senses to a recognition that he knows nothing; this fits him for Divine wisdom which God alone can impart. In attaining this view Philo was doubtless helped by the Greek theory of the contemplative life and by current scepticism. The difference between his view and that of Plato, or Aristotle, is obvious; for the Greek contemplation was the last fruit of human wisdom; for Philo it is the first fruit of salvation. Similarly Philo cannot rightly be called a sceptic. Scepticism implies a belief in the impossibility of attaining absolute knowledge; Philo adopts scepticism merely as a phase of his belief that empirical knowledge is only a preliminary stage on the road to the great Illumination.

§ 7. Life on this theory divides into two classes of

experience: the one is the objective experience in which we come into relation with an inferior external world; the other is the subjective experience which wholly or partly dispenses with the inferior external relations, having in their place some kind of relation with superior external powers. The latter is sometimes called absolute; but a term which implies no relation is not accurate in this connection: man does not think himself, according to Philo, nor is he thought thinking itself: at his highest level he is in contact with a superior instead of an inferior world; in relation, therefore, to something not himself. We will now expound the doctrine from both points of view.

The idea that knowledge is attainable when the senses are inactive naturally brings into prominence the phenomena of dreams, trances, and prophetic vision. The phenomena of dreams are not regarded by Philo as unique: they are akin to the state of meditation, for both are conditions in which the mind abstracts itself from the senses. Intimations of immortality can, he says, be obtained even in the corporeal life under two conditions: first, in sleep when the mind discards all the imaginations derived from sense and is inspired by the truest divination; secondly, when in philosophic speculation the thinker shuts up the channels of the senses and forgets the outer world. From this passage it is clear that dreams are not after-effects of sensation; they are not movements set up from without, but activities of the mind moving itself: for even the imaginations are superfluous. In his treatise "On Dreams sent from God" Philo distinguishes three kinds. The first kind proceed from God as Author of its motion and reveals what is known only to him; the second kind arise when our soul is set in motion simultaneously with the soul of the universe; the third is the kind that requires interpretation, but of its nature no

further explanation is given. The second kind in this catalogue clearly indicates a theory of sympathy, and Philo explains the sense in which that doctrine might be accepted. Moses believed in the doctrine of sympathy, but not in a way that implied a world-soul; in other words, not in the Pantheistic sense. On the contrary, Moses "teaches that this universe is held together by invisible powers which the Creator has spread from the extreme borders of the earth to heaven, making a beautiful provision to prevent what he has joined together from being dissolved; for the indissoluble chains which bind the universe are his powers." A complete explanation of these powers could only be given in a treatise on Philo's religious and philosophical views. As this account is limited to his psychology nothing will be said beyond what is necessary for a comprehension of the rational life.

§ 8. The problem of evil received far more consideration in the Hebrew than the Greek writers: in both it led to a feeling that God could not have directly created what is bad; in Plato the idea of imperfection in the created makes necessary the introduction of Demiourgoi; in Philo the idea of sin leads to a whole system of powers intermediary between God and the created universe. Granted the right to multiply entities, the philosopher of the first century A.D. had no lack of inducements. The Platonic "ideas" furnished one cue: the Stoic "reason" furnished another: the doctrine of angels furnished still another; from every possible source some material was furnished for the construction of this world of beings whose nature could in reality be neither proved nor disproved. It is, indeed, far from clear that these powers were beings at all; but it seems most probable that Philo combined two views: the Platonic doctrine in the "Timæus" and the Stoic doctrine of immanent

reason, making these "powers" immanent forms of the Divine Power. In this way he could keep both unity and plurality, but it is notoriously difficult to show exactly the degree of independence which parts can have in a unity which completely absorbs them, and Philo is scarcely conscious of the degree to which he confuses the two ideas of these powers according as they work independently or are processes of the One Power. From the Stoic side Philo takes the fruitful idea of tension. The Power of God is active everywhere, but does not therefore go forth from him: the activity is not the substance and yet is not separated from the substance. The analogy here is that of light: the sun lights the world, but does not come into it; the eye reaches to the heavens, but does not come out from the body; and God in a similar way moves all things without going forth to them. Aristotle and the Stoics have contributed an equal share to this doctrine.

It is now clear that God can communicate himself to the human mind and yet remain unalterable and indivisible. This is an activity of God; but the power of the cause is relative to the nature of the object: the seal leaves its impress only on the impressionable, and man must prepare his soul for the communication of God. In close connexion with the doctrine of powers stands the doctrine of the Logos. In accord with the Stoics, Philo distinguishes in man Logos as reason (the indwelling Logos) and as speech (the outgoing). The peculiar form of the Logos doctrine in Philo is due to the religious interests which lead to a theory of the universal Logos as comprising both the reason of God and the expression of this reason in the cosmos. The analogy which we expect between the expressed reason of God and the uttered reason of man is not actually elaborated; probably because the idea of utterance is too closely connected with the human form of speech and cannot be affirmed of

God. The main result is that reason is made, primarily, the thought of God; secondly, rationality in the universe, and at the same time rationality as consciously realised in man. Reason is the supreme Logos and all reasons, as its forms, are dependent forms of the Logos. The various aspects of the life of reason are not treated systematically by Philo. We hear of discursive reason, calculation, memory, arts, sciences, forethought, and so on. Each of these is in its true nature generic; in other words, the individual's power is a manifestation of the particular Power in question; hence the mind has its powers in the sense of participating in Powers that were before it and will be after it. Apparently the reason belongs to man only as a temporary phase or embodiment of universal reason regarded as a plurality. Mind is a light to the body, but yet its own light is derived, and, like a prism, it breaks up that light into endless forms that are yet always in themselves a unity.

The whole of our psychic life is a process which, rightly conceived, is the regeneration of the soul through wisdom. Virtue can be acquired by nature, training, or learning. In addition to the cardinal virtues, and the idea of virtue as a mean, piety and holiness are added. The virtues are in all cases psychological states: man *is* virtue in the sense that virtue becomes his own nature; thus virtue is the indwelling of the spirit by which we attain everlasting peace and the vision of God.

CHAPTER III

THE ECLECTIC WRITERS OF THE FIRST CENTURY A.D.

§ 1. PLUTARCH belongs to the school of Eclectic Platonists; he was preceded by Eudorus, Arius Didymus, and Ammonius, his teacher. Eudorus was strongly influenced by Stoicism, and directed his attention to the psychology of the practical life. The inclination (*ὁρμή*) requires to be controlled by reason: this implies first a process of complete deliberation, and, secondly, the direction of the inclination upon the object which reason approves as worthy of action. The psychology of conduct thus divides into three parts: the theoretic, the emotional, the practical. Eudorus does not seem clearly to understand the nature of will: he regards action as dependent on a natural dynamic force, the impulse, and right action as dependent on the guidance of this force by reason. The idea, therefore, can control impulse; but Eudorus fails to solve the problem of impulsive action; probably he thought right action needed more explanation than bad. He distinguishes impulse in the specific sense of the term (*εἰδική ὁρμή*) from the emotions (*πάθη*), which he classes as impulse carried to excess. Of motives to action Eudorus recognises two classes, the conditional and the exciting or inducive; while men are deterred from action by that which removes impulse through the reason (*παραμυθητικός*, *παθολογικός*). Particular actions are regulated by the causes that form mental states, habits, and the like, and

training assists in forming these. Good action in the highest sense depends on the will to do good.

Arius Didymus, an Alexandrian, deserves notice for his explicit statement that the souls of the wise after death ascend to the upper regions and there dwell in bliss. This conditional immortality was a view that could be deduced from Plato, and seems to have been held as a Platonic doctrine by later writers.[1]

Ammonius of Alexandria maintained that the human will was free: law in the moral sphere is binding in the sense that man does not desire to break it: a shallow view which avoids difficulties by assuming that the will is naturally inclined to the good.

§ 2. Plutarch combines a scepticism worthy of the Academy with a strong regard for authority and a desire to omit no possible source of truth. All that is best in Oriental and Hellenic traditions appears in his doctrine; the result is a collection of ideas rather than a coherent system. A strongly practical tone pervades his work: philosophy is ultimately a means to health of mind, as medicine gives health of body: in the study of passions and motives lies the whole utility of speculation.

Plutarch does not accept as adequate the idea of an opposition between form and matter. The principle of evil must be as active as the principle of good; and, with a touch of Orientalism, he places beside the principle of order a principle of disorder in the universe. Similarly in man, evil is due to the presence of a soul that works the works of disorder or evil.

In accordance with this cosmic dualism Plutarch recognises an essential dualism in man. The soul is a unity of opposing principles, the rational and the irrational powers.

[1] Chaignet (III, 103), in saying this view is opposed to Plato, overlooks the extent to which it is implicit in the idea of purification (p. 97). Cp. Phaedrus 249, Symposium 212.

In order to secure a real opposition of good and evil principles, Plutarch sets the reason over against the irrational principles which include desire and spirit. With this Platonic division he combines the Aristotelian doctrine: the nutritive and sensitive functions are included among psychic activities and are to be regarded as ethically neutral. Thus the (early) Stoic unity is given up in favour of ethical dualism, and with the ethical is combined the biological conception of "parts." The resulting fivefold division (nutritive, sensitive, desire, spirit, reason) shows the double purpose of Plutarch's method.

In dealing with sensation Plutarch emphasises the difference between the affective and attentive processes. The impression is realised as perception only when the mind is exerted to grasp the meaning of the impression; in thus thinking about the given sensation man exerts a voluntary power of attention, and, so to speak, assents to it. By reason of this the sensation becomes connected with the will and therefore with moral action.

Influenced by Jewish notions, Plutarch describes God as the origin of all that is good; he is one who sees but is not seen; knows and is not known; though we attain some knowledge of him through nature and still more in moments of inspiration. He is Providence, superior to intellect, a forethought (*πρόνοια*) which is before all thought (*νοῦς*); and between God and man there are intermediate beings, the lesser gods who reside in heaven and the spirits (dæmons) who watch over men. The universe is governed by Providence and destiny. Nevertheless the will is free, for Destiny is a general law of connexion, a hypothetical necessity, which leaves particular actions untouched. Men therefore act under unchanging laws, but the law does not compel any action: it merely expresses the inner significance, the universal connexion of cause and effect, which is presupposed in

all action. In spite of the transcendental nature of God and Destiny, Plutarch would preserve man's freedom and responsibility intact: he does this by a determinism which is sound and well formulated: man's choice is not, as fatalism implies, an apparent choice between the possible and the impossible, but a real choice between possibilities. Having thus—in opposition to the Stoics—established a real freedom of the will, Plutarch discusses the nature of the moral struggle. The dualism of body and soul he regards as superficial: there is a deeper cleft, within the soul itself. As the body is to the whole soul, so is the irrational to the rational self: there is "a second body" which necessity has bound to the rational soul. These conclusions Plutarch might draw from observation: he expresses them rather as deductions from his theory of the universe; and on this basis we can proceed to assert that the intellectual soul is not an integral part of the complex whole; it only coexists with the inferior part and can have a life of its own, pure and incorporeal. Hence there are three degrees of being: pure reason, reason mixed with the sensitive soul, and soul in body. Two conclusions follow: first, that the body is a hindrance to the reason; second, that the reason is never really in man, it is attached to him, comes from without and is the "spirit" (dæmon) which accompanies him in life. Man's thoughts, therefore, come to him from outside, from something not himself, and his intuitions are really revelations. The soul, thus conceived, can obviously survive the death of the body and be immortal. The proof that such is the case consists in (*a*) the need of a future life in which goodness may be rewarded; (*b*) the origin of the soul, which is born of God; (*c*) the natural feeling of abhorrence from the idea of annihilation.

Plutarch enlarges upon the aspects of the soul's life which are connected with the idea of revelation. Sleep

is for him a separation of the soul from the body. The condition of the body, and particularly its lack of sensitiveness, seems to establish this: but Plutarch's reasons for rejecting the scientific view of sleep are to be found in his desire to explain dreams as experiences of the soul when it withdraws into itself away from the body. Plutarch believes in a "second sight," which is an activity of the soul possible under certain conditions. These conditions are realised in sleep, in physical states produced by ascetic practices, and under the influence of certain exhalations, e.g. those at Delphi. The "scientific" explanation of all these cases is that the pneuma becomes more refined and capable of exercising powers which are hindered by the grossness of its usual condition. With this mystic notion is associated Plutarch's doctrine of a world of spirits (δαίμονες), a kingdom of purer beings with whom the soul of man has communion when it is purified by the contemplation of eternal truths.

Platonism here follows the lines of development to which it seems to have been doomed by an evil fate. The union of soul and body is traced to a "fall"; the soul has consequently a power of self-restoration by which it may ascend from earth to the moon and thence again to the sun. For the sun is the original source of spirit as the earth is of the body. This theory is grounded in Platonism in so far as it starts from the idea of a soul imprisoned in the body: it claims affinity with Aristotle in its recognition that reason is ultimately "from without"; and it proclaims its divergence from both by the extent to which the original theories are given an entirely new significance due to Hebrew and Oriental ideas of the upper world and its denizens.

Plutarch paid considerable attention to the problems of animal psychology. He saw that it was necessary to admit that, if all perception requires some activity of

thought, the animals also could think. At the same time he reduced this as a rule to the level of unreflective thought called instinct. Owing to the immediacy of instinct animals are better endowed than men for attaining virtue, provided, of course, that the organism was not deranged.

CHAPTER IV

THE PAULINE DOCTRINE OF MAN

§ 1. The psychology found in the writings of the Fathers has its root in the teaching of the New Testament, principally in that of St. Paul. The doctrine of St. Paul is itself a product of earlier speculation: it embodies older views and actually contributes little that is new. The characteristics of the new direction of thought are determined by the fact that rationalism gives way to spiritualism, the scientific to the religious standpoint. To say that Christian doctrine is primarily ethical is to say very little. Plato had used the ethical norms in a manner equally emphatic. The real difference between Platonism and Christianity is to be found in the difference between Hebraic and Greek temperaments, between the desire to feel strongly, to nourish lofty passions, and the (Greek) desire to subdue passion by reason. The Stoics interpreted the mixed mood of their age rightly when they declared that restraint was the essential element of goodness, and yet saw in rational joy the completion of life. The best introduction to patristic pyschology is the ambiguous language of St. Paul; for here we are at the fountain-head of all the doctrines which treat the soul from the point of view of Christian Redemption, and which, therefore, find the questions of origin and destiny most important. The ideas of eternal life, of conquest over sin achieved partly by works and partly by grace, and of individual worth are the ideas that control discussion. The details are selected to suit these ends:

at first science and tradition are neglected; but each succeeding writer adds new material, and as point after point is added the accumulated wisdom of previous ages is absorbed into the body of doctrine until the treatment becomes as comprehensive as we find it in Augustine or Thomas Aquinas.

§ 2. With an abruptness that is a little startling St. Paul begins with the first man, Adam. Greek theories inclined rather to the thought of a first matter; or spoke of man as created along with other forms of being as a class. Whether the theory tended to creationism or to a form of development-theory, Man, for the Greeks, begins as a race: for St. Paul there is one historic individual, the first man.

For the creation of this first man St. Paul has accepted the Hebrew account (Gen. ii. 7), according to which the creation of man was the act of God. Before the living man, there existed God and earth: God took of the earth, shaped it in the form of man, and then breathed into it the breath of life. Here we have three elements not far removed from the products of analysis in Greek philosophy: we have matter, form, and life.

In regard to the matter, little need be said: it is the terrestrial aspect of man and passes easily into the ethical notion of a lower nature which is of the earth earth-like. The form is primarily shape, and all organs are from the first created in their final completeness to serve the purpose which they now fulfil. So far man is but a perfect statue: the last great change is the miracle that makes the statue live. In opposition to all who make life dependent upon the organisation of matter, St. Paul speaks of the life as something added to the formed matter. For the author of Genesis ii. 7 the soul plays no part in forming the body: it is not a vital principle inherent in matter;

on the contrary, it is the first movement which is imparted to the inert mass. The essential notion seems to be the act of respiration; hence God's act of giving life is expressed as "breathing into" the material form, that is, as the act which starts the breathing of the individual. St. Paul follows this account of creation but uses his term "psyche" in a more developed sense; for him it is a principle of life imparted by God to man. At this point the Hebrew concept of "breath" drops out of the significance of "psyche" (ψυχή), and the Greek doctrine of the soul furnishes the guiding line for its description.

The vital principle to which we give the name "soul" is, in the Pauline doctrine, common to man and the animals. If we now inquire into the life of the soul, we shall find the subject treated as a physical science—as a science of the natural man. The natural man or "the flesh" has its thought, wish, desire, and reason. However high these faculties may rise, even though by reason we know God, yet they remain earthly, natural, and not spiritual. Thus a dualism is created; man is natural and spiritual. Within the natural man we find all the organs of the sensitive, appetitive, and rational life; there is no opposition between matter and mind; man is simply a psychic creature (ψυχικός), and the Pauline view is monistic so far. To this principle is added an ethical or theological dualism. For it is not reason that constitutes the immortal soul: man as a creature is wholly mortal; reason does not outlive the bodily life. The immortal is spiritual (πνευματικός), another and a different principle wholly distinct from the psychic nature. In this use of spirit (πνεῦμα) the Pauline theology abandons the Greek line of development. The spirit is that part of man which enables him to draw near to God; but this is not to be achieved by knowledge, and the vision of God is no longer a reward for intellectual perfection, but a prize of that

high calling which is ours by virtue of the moral nature. The spirit is thus primarily the divine element in man: its work is to mortify the flesh rather than to build up the body; it is not the natural principle of the Greek physical theories, but a unique principle that serves to explain the moral life of mankind and makes possible a mystic unity with God. The end of life is regeneration, and this is achieved by the entering into man of the spirit of God. The human spirit can be prepared for this spirituality by a moralisation of the lower nature; the conquest of the flesh is a removal of obstructions, and the soul that realises the truth of Christian doctrine is fit for the work of the Holy Ghost. As the first man's spirit came from God, so in this second birth of the spirit is an influence or inflowing from without, and what neither intellect nor will can attain is given to the pure in heart by the grace of God. This is the full stature of man, the final state of perfection which everyone is able to reach so long as sin does not prevent. Spiritual perfection is thus the crown of the psychic life. For its attainment man does not require a knowledge of things but rather a knowledge of himself. In the place of objective knowledge (ἐπιστήμη) St. Paul puts a subjective knowledge which is wisdom (σοφία) in the highest sense. To know oneself is for the Christian to realise the motives and intentions of the will, to have a conscience; the ideal is to have a conscience devoid of offence. Sin is thus made essentially a choice of evil accompanied by a knowledge of the good: when a man sins he sins against the light that is in him; a wrong committed unknowingly is not a sin and is not imputed for sin; only when the law is revealed can there be sin against the law.

The position of St. Paul shows how the teaching of Christ influenced the study of mankind. In the main St. Paul abides by the Hebrew tradition. It would not

be difficult to quote "anticipations" of Christian doctrine from the Stoic writers or indicate points of affinity between Plato and St. Paul. But these common elements are details only; the Christian doctrine recasts all the material that it uses and stamps it with a new seal. Moral aims were common to Plato and St. Paul, to Stoic and Christian; but the personal view of God and the consequent strong realisation of human personality were the property of Christian doctrine and its predecessor, the Hebrew Scriptures. The older Greek psychology abides within the limits of analysis and observation; Christian psychology is descriptive and introspective, more attached to faith and belief than to reason and sight. While the Greek required to base his belief upon evidence, the Christian could esteem those who having not seen have yet believed. The transposition of ideas was reflected in that later motto which to a Greek was foolishness, *credo ut intelligam.*

CHAPTER V

PROGRESS OF THE CHRISTIAN DOCTRINE IN THE ALEXANDRIAN SCHOOLS (I)

§ 1. The conflict between Christianity and Paganism brought to light many difficulties in the Christian theory of the soul, and the progress made during the first century is slight. The works of the apologists contain a few points that seem to indicate the nature of the development as it advanced. In Justin Martyr the Old Testament doctrine and Philo's works form the main basis; Plato and Moses are somewhat uncritically identified and the prominence given to Plato is more in name than in fact. For this writer immortality is not the property of the soul, neither is the soul a particle of the divine mind; immortality is attained from God as a special gift. Justin wrote a treatise on the soul, but the work is lost.

Athenagoras was definitely Platonic, but Tatian showed a strong antipathy to Greek doctrines. According to him man is a combination of body, soul, and spirit. The soul can ally itself with spirit or body and ascend or descend accordingly. Stoic influence is evident in Tatian's doctrine of two spirits. Of these one is universal, a Pneuma in everything; the other is the spirit of God, a higher spirit dwelling in man and at the same time a part of God. This divine spirit resided in man at first, but when man sinned at the Fall it left him. This spirit is the power that enables some to prophesy and to see the spiritual beings (dæmons) whose nature is akin to that of fire and

air. The knowledge of things divine is attained through faith.

§ 2. The Christian schools of Alexandria were naturally led into the paths of eclecticism. The works of Philo showed a mixture of Greek philosophy and Hebrew tradition: Greek and Jew were united in that fervent and illogical faith, aptly described as a tendency rather than a system. As the Jewish-Alexandrian work presents one tendency, so the Christian-Alexandrian presents another. Their common qualities are indicated in the common title Alexandrian; their differences arise mainly from the different views they take of that Greek philosophy which both accept as true in part. Through the voluminous works of the commentators and allegorists runs a vein of consistent theory, varying in quality but never wholly devoid of some rich metal; the task of eliminating what is valuable has not yet been accomplished, but it is sufficient for the present that the historical sequence can be shown with considerable clearness. Clement of Alexandria planned and perhaps wrote a book "On the Soul." No trace of this now exists, and his opinions can only be reconstructed from the scattered statements found throughout his works. The ambiguity of the result is apparent from the different opinions of writers. Some regard him as Platonic; others emphasise the Stoicism of his attitude; to some he appears an amorphous collection of doctrines. The evidence seems to support none of these views; for while the language of Plato, the ideas of Stoic writers, and the vagaries of Philo jostle each other in every passage, there is an atmosphere of independence which rules them all. It is not with these or their phrases that Clement is concerned; he has the disregard of a true believer for the niceties of expression; his eagerness to state his belief seems to break out into each and all of the possible

types of formulæ; salvation and resurrection are the theme which makes the language of philosophy seem meagre and elementary. Amid the noise of dispute and the battle-cries of sects, it is easy to forget that though the old phrases are still used, the strife is waged under a fresh banner. Whether the phrase is Platonic or Stoic, it is used now by one who views those theories as plagiarisms, brilliant interpretations of a truth revealed primarily to Moses. The importance of phraseology dwindles immeasurably at the realisation of that fact. Academic and Peripatetic, Stoic and Epicurean are distinctions that lose all value for one who sees in them only a channel for doctrines derived from a higher source and now again revealed more fully in those last days. Right across all the distinction of Greek schools falls the division of Christian and pagan; pagan philosophy collapses into a mass of subtleties uniform in character, a colourless sequence of attempts to fully understand the inspired wisdom of the Old Testament writers. The battle is set in array between orthodoxy and heresy.

The value set on Greek philosophy varied with different writers, but in the period and school of which we are speaking there was never a doubt of its subsidiary character. Clement defends and praises it only as the handmaid of wisdom: he is more the patron than the disciple of Plato: he is more inclined to excuse the shortcomings of the Greeks than lose himself in admiration of their achievements. Thus was the wedge inserted at the thin edge: the cleft widened rapidly. It was not possible to continue an elaboration of doctrines on divergent lines without a final split: problems arose and dogmatic solutions were demanded, forcing the learned to decide finally for Paul or Plato, for Stoic determinism or Christian freedom. The evolution of these problems will be apparent to the end of our subject. With Clement begins the serious development,

and in him the student finds the first crude fusion of Christian and pagan speculation.

§ 3. Clement's doctrine of the soul begins from the biblical doctrine already described. The soul of man is a unity with a dual origin. It is in part rational or celestial, and in part irrational or terrestrial; and these "parts" are distinctions rather than divisions. The rational soul (variously called ψυχή λογική or τὸ ἡγεμονικόν) is identical with that "breath of God" mentioned in the Book of Genesis. It is either imparted by God to man or transmitted to man by the angelic powers, the creating spirits of Plato. Its essential character is that it is divine in origin and nature, a reason closely akin to divine reason, the ground and possibility of man's ascent to God. Sharply opposed to this rational soul is the irrational soul (ψυχή ἄλογος), which has a wholly different origin and is akin to the life-principle of animals. The details of this exposition are obscure, but such is the position in its broad outlines; in language and general conception the doctrine is strongly Platonic.

Turning to the question of the nature of man, Clement comes upon the problem of natural generation and the transmission of the soul which that involves. The central problem here is the question of the relation between the two souls. In the first man, Adam, the act of God creates one soul with two natures; henceforth the irrational or earthly soul is identical with the principle of life and is transmitted from parent to child. In its material aspect this is a fusion of the elements, of the world-matter in all its forms. This interprets the biblical phrase, God created man from the dust of the earth; it also leads to an identification of the soul with blood and seed; the flesh is the dwelling-place of the irrational soul, within which again is the rational soul. There is thus an outer man

and an inner man, somewhat literally interpreted as dwelling one within the other. The strong influence of Greek theories here asserts itself and produces an innovation on the original biblical doctrine. In Clement's analysis of the human mind there is a complexity and confusion beyond understanding. In his grasp of the psychic life there is the consistency of a clear purpose. The idea of spiritual progress is the ruling factor in his descriptive work, and the failure of his analysis is compensated by the success with which he completes his ethical doctrine. In addition to Platonic and Stoic ideas of the soul there is the doctrine of Wisdom (σοφία) already utilised by Philo. For Clement Wisdom is the First Mover, the source of movement for the soul; by Wisdom the soul is sown with the seed of the spirit and becomes spiritual in its nature. Since Wisdom, in this sense, is one with God, man also has through Wisdom the seed of a divine nature: he is capable thereby of rising up to the likeness of God. Thus the foundation is laid for a doctrine of redemption through Faith and Knowledge: before considering that doctrine in detail a few more remarks on the nature of the soul must be made.

When speaking of parts of the soul Clement employs either the Stoic division into eight or the Platonic division into three parts. In one passage the Stoic catalogue of eight parts is used as the basis for a complicated division into ten parts; elsewhere the Platonic tripartite division is quoted; the inconsistency is unimportant as Clement seems to have regarded the Stoic division as more exact, while the Platonic is more adapted to the doctrine of self-education. The process of self-education is a purification of the soul and a consequent return to a godlike nature: it bears a close resemblance to both Platonism and Stoicism in making reason superior to sense; it differs from

both in the particular meaning given to reason by interpreting it as Wisdom.

§ 4. The soul begins as a blank: the senses supply knowledge by way of impressions, and it is the irrational soul which, on account of its relation to the flesh, is capable of receiving the impressions. The irrational soul is easily moved and its receptivity is presupposed in conscious life; its movements are not, however, capable by themselves of giving knowledge. For this the co-operation of the rational part is required: a transition is then effected which amounts to self-consciousness and is the beginning of order in the whirl of motions. Here Clement reproduces the doctrine of the "Timæus," modified by the Stoic idea of a regulative reason; he is distinguishing the life of successive feelings from the life of ideas, and seems to grasp the necessity of introducing a principle of reason in order to convert impression into idea. The Stoic doctrine of activity harmonised with the Christian idea of personality and tended to make more explicit the assertion that knowledge is not a mere product of accumulated impressions but an outgoing activity of soul. Psychologically the result is a doctrine of apperception as well as perception, in which the development of Stoicism is apparent; for the perception is equated with the Stoic apprehension (*κατάληψις*), and the apperception with assent (*συγκατάθεσις*). The irrational soul serves as a mediator between the sense-objects and the rational faculty. Man differs from the animals in the possession of this rational faculty (*λογική δύναμις*), and through it he attains two powers, the impulse toward thought and the discrimination which makes him master and not slave of the sense-images. Following the Stoic line of thought, Clement regards reason as the power of finding a standard or criterion and

thus attaining a judgment of value in respect to the world of sense-impressions.

The psychology of cognition in Clement is purely an introduction to the ethical teaching: it is a preliminary sketch of the human mind expressed in occasional summaries of previous systems. The psychology of conduct occupies a more important place, and, though drawn from various sources, is treated more elaborately as it leads to the ethical and theological conclusion of the whole scheme of Clement's work.

§ 5. The human soul comprises two spirits (πνεύματα), the irrational or fleshly and the rational. In addition to its function in sensation the irrational spirit is the source of the passions, the sphere of desire, pleasure, and anger: it is, so to speak, the entrance for the passions and the exit for actions. The intentions which arise from thought and understanding pass through this intermediary into action. It follows that either the movements of the irrational soul overcome the rational, or the rational conquers: the aim of life is the attainment of that state in which reason is permanently superior. The activities of the lower and higher spirits are distinguished as desire and impulse; desire (ἐπιθυμία) belongs to the irrational part, while to the rational part belongs impulse (ὁρμή). Clement opposes the Gnostic "heresy" that the body is essentially bad: he does not regard desires as wholly bad but rather as ethically indifferent; goodness and badness depend upon the end which they subserve, and this is a matter of will. When the will employs the (natural) desires for evil ends, they become evil. This distinction is important; it follows from the previous doctrine that all conscious distinctions belong to the ruling reason (τό ἡγεμονικόν), and this is the first clear recognition of the fact that good and evil are purely kinds

of rational decision. From this arise important developments in the doctrine of will and freedom in choice.

The doctrine of Plato tended to make the irrational part of the soul evil in its own right: the Stoic theory tended to absorb will in reason; both drift helplessly toward rational determinism. The doctrine of redemption which figures in Hebrew and Christian theory required a theory of the will which admitted full responsibility. Sin is more than error: the position of Socrates could not be maintained by one who believed in the reality of sin. If, then, vice is voluntary, but the will is not inherently bad, it will be necessary to show exactly how the will is led into sin and how it may attain to righteousness.

Knowledge and action are so closely united in the doctrine of Clement that the solution of these questions must begin from a statement of the rational activities. The higher reason (*τό ἡγεμονικόν*) has power of choice (*προαιρετική δύναμις*) on which depend the search for empirical facts, instruction and complete knowledge. Thus the progress of the soul is made dependent on the will to know. At the first there is complete ignorance, and the individual is placed in a world of desires and imaginations with no guiding light of reason. Hence the commission of sins. For want is natural to man; and from want arises desire which leads to sin; vain imaginations also lead astray. In both cases the moral guilt arises from the fact that the will gives assent; only by this act of will is sin constituted, and therefore it is just in the fact of sin that freedom is demonstrated. On the other hand, the will is not essentially sinful: it is from God and must be good; so that the cause of sin must be looked for outside the will. Clement finds this cause in false images, snares, and delusions that mislead the soul. These are states of the soul; not external things but internal forces. With the facility common to his day and natural to a student of

Philo, Clement makes these internal forces into spiritual influences, devils that possess men. Gnosticism here undoubtedly revenges itself by conquering the mind of its opponent; for Clement admits a distinctly Gnostic doctrine. Sin is the triumph of darkness over light, of ignorance over knowledge. The way of salvation then can be only the way of knowledge.

§ 6. From the flux of sensations man attains to a condition of partial stability by Faith. The soul has an impulse after knowledge, but its attainment is limited; before knowledge can be reached a degree of practical certainty must be accepted; it is necessary to believe when we cannot see, and the conscientious exercise of faith is the substitute for knowledge. There are natural limits to human attainment; men can be classified as material (ὑλικοί), psychic (ψυχικοί) and spiritual (πνευματικοί). To the last only belongs the possibility of complete knowledge (γνῶσις); for them the goal is a state of purity and rest. This is a state of vision (ἐποπτεία or θεωρία), and the idea clearly comes from Plato. But with it are mixed various elements. It is on the one hand a state of rest such as Philo described: it is a condition of apathy in effect, though not the Stoic apathy: it is immortality, the successful working out of the Aristotelian maxim, put on immortality; finally it is the perfect life of reason, faith made perfect through the vision of eternal truth. In its attainment man must have assistance against the evil spirits that assail him; and this is given by Christ the embodied Word.

The most important points in Clement's view of the soul can best be indicated by stating his views on the development of spirituality. The true end of life is likeness with God: this is attained when the soul realises a harmony of all its parts. Harmony is one keyword in Clement; it

indicates the belief that the fully developed soul organises will and knowledge and action in a perfect unity. Another keyword is Faith. Faith is essentially an action, and is closely akin to the Stoic "assent" (συγκατάθεσις). In human life every mental act involves belief or faith; in perception, for example, the individual accepts an indication and asserts an object; this is the primary form of Faith. In the beginning any isolated fact lacks proof; but man cannot refuse to accept everything; he must come to a halt and accept something. The liberation from doubt is accordingly an act of man, a will to believe; in this act man asserts his belief in some truth and so in truth itself and ultimately in God. In this sense it is true that "there is no third term between a self-communication of the Divine and absolute scepticism."

Clement, anticipating Augustine and Descartes, finds the starting-point of all our mental life in this assent to truth: all knowledge is only the elaboration and practice of belief. Belief is the active element in our knowledge; it supplements experience; and it furnishes a criterion of truth, for what we cannot believe we cannot accept as true. Here again the new doctrine transposes the Greek order: the motto is *credo ut intelligam*, and faith is the persistent element in all our mental progress.

Some rest in faith and ask no questions; others press on to the full understanding of all that is implied in faith, and these attain Gnosis, the perfection of human character. The education of the soul is carried out by means of action: nature cannot be forced but only developed: education, as in Plato, is a growth effected by right nourishment and right exercise. Virtue is knowledge in the sense that without knowledge virtue is impossible. This knowledge is not the mere acquisition of rules, but that inscribing of the law upon the heart which is due to right performance. Thus Clement grasps the important

truth that character is a system of actions which have become natural. The crown of the discipline which leads to this end is love ; at the last there is that perfect harmony which makes obedience to the law a service of love and, at the same time, a pure love of God. Self-love is really the root of evil : education overcomes this by making the self a harmony so that the will is no longer divided but wills the true good as its own object of desire. In this sense the will is free ; because there is no conflict between law and desire but all desire aims to fulfil the law. The law is also reason, the Logos. There is in man the seed of the spirit (*σπέρμα πνευματικόν*) : Wisdom (*σοφία*) is the Logos and the first-born of God ; it is also the subjective knowledge which man may have imparted to him. Here Clement adapts Philo's teaching. The Logos as Wisdom is the wisdom of God ; as going forth (*λόγος προφορικός*) it is the revealed wisdom, God made manifest in the Word that became flesh ; as dwelling in man it is derivative wisdom or knowledge (*γνῶσις*). The upward progress of the soul is never more than a preparation : by it the soul is made fit to receive that communication of Divine wisdom which is the only source of absolute truth and knowledge. Man lives by faith and incomplete knowledge : his final reward is a spiritual vision for which there is required a light from above, the irradiation of the divine Reason.

CHAPTER VI

PROGRESS OF THE CHRISTIAN DOCTRINE IN THE ALEXANDRIAN SCHOOLS (II)

§ 1. Our knowledge of Origen's views on the soul would have been more extensive and accurate if that voluminous writer had carried out his own programme; for he makes an elaborate statement of the problems awaiting solution, but never wrote the intended treatise. As it is, our information is scattered: the statement of the details in one consecutive account magnifies their importance; yet there are points of interest that deserve to be recorded. In the main Origen continues the work of Clement of Alexandria, but his method of exposition is that of a commentator or a controversialist: he seemed to require as a medium for his thoughts either a text to elucidate or an opponent to refute. What he says is therefore as a rule only that which is relevant to the occasion; the sequel is left to be added on some other occasion when another point is under consideration. It follows that omissions count for nothing: it can never be assumed that Origen disbelieved what he did not say; so long as the fact omitted is not in contradiction to his views it may be assumed that he did not reject it. This will not justify the attribution of anything to Origen over and above what he says; but it is useful to recollect that Origen worked on separate points and assumed a knowledge of current doctrine.

Origen makes all things dependent on God as their

Creator. God, matter, and souls make up the totality of things; and God has united matter and souls in one world. Matter has various degrees, from worst to best; the soul too has degrees though it is one and the same in all. There is a soul in all animals, and its substratum is the blood, or, in creatures that have no blood, the vital fluid. Man has also the spirit imparted by God. The soul is Reason (νοῦς) fallen from its original glory and grown cold. How Origen proposed to reconcile these views of the soul cannot be discovered; for one theory says that soul is principle of life, the other that it is a degraded reason: Origen accepts both in spite of their opposition. So far as animals and men are concerned the difficulty might be overcome by supposing that Origen followed Plato in regarding the soul as living and giving life. But Origen's real difficulty is with the angels and dæmons whom he also wishes to call souls. Some light may be obtained from the passage in the "De Principiis" where God is an ever-burning fire: the soul so long as it remains in God or with God is penetrated by this fire and is, so to speak, all fire. If the soul departs from God it loses this fire, grows cold and materialises. This seems to explain Origen's idea of cooling (ψυχή, ψυχεῖν) and the position of the soul as intermediate between flesh and pure spirit.

§ 2. The basis of Origen's speculations is Stoicism, the Stoicism of the Platonising Stoics such as Posidonius. He adopts the dualism of nature and soul (φύσις, ψυχή): he classes the functions of the soul as imaginative and impulsive (φανταστική, ὁρμητική) in Stoic fashion: in the sphere of nature motion is confined to organic activities while the soul moves by means of images acting on imagination. In animals such as bees or spiders the imagination acts only in some one prescribed way: their instinct is simply limited imagination. Reason is a fourth kind of move-

ment ; it differs (1) from imparted motion such as inorganic things require, (2) from the inner movement of plants or (3) of animals ; it begins and ends in itself. This distinction is obviously meant to prepare the way for a doctrine of freedom : reason is not the slave of imagination or appetite, and choice is not the mere supremacy of the strongest motive ; on the contrary, reason selects its line of action with reference to, but not under, the control of the sensuous experiences. The reason has a natural tendency to distinguish good and bad, and adopts or rejects the imaginations accordingly. Here the Stoic doctrine is abandoned in favour of freedom or liberty of choice which with Origen is a postulate : without freedom of choice there could be no morality. This liberty is in reality the Stoic " assent " (*συγκατάθεσις* in " De Principiis," 3. 1. iv) taken as the element contributed by the person to the action : the mere presence of an object is not a reason for sin nor is it an irresistible attraction : the assent of the mind converts the outer conditions into inner causes of action, and therefore all action is, to some extent, in our power. Here, as often, the Christian writer avails himself of the doctrine of concausation, the *συναίτιον*, which the Stoics had taken from Aristotle. This idea of co-operating causes was the one road out of fatalism which the Stoics desired to use. The Christian finds it doubly useful. It explains first the connection between temptation and sin : the temptation is the circumstance or occasion, the sin is the act of using the occasion ; as there is no compulsion in an occasion, so virtue and vice are free. It explains also the relation of God to man, for man does not attain goodness by his own effort alone ; his effort is rather the occasion for the divine act by which he is assisted ; God co-operates with man to achieve what man cannot do unaided. On this point of moral freedom Origen finds it convenient to combine Aristotle's

doctrine of responsibility with a Stoic version of free movement; he is perhaps hardly aware that by freedom he means more than responsibility, and the Stoic element explains nothing beyond the mechanics of movement. Origen was aiming at a theory of "absolute" liberty; he failed to see that he had ended in determinism, because for him reason and will are ultimately the same. Origen calls the will "rational desire" (λογική ὄρεξις) and unites love and reason in it. With that he drops into the familiar line of Platonism, and its doctrine of Love (ἔρως), joined with Aristotle's conception of God as the final source of all upward striving.

§ 3. The Stoicism which proved vain in face of moral problems returns to assist in the transcendental physics of the soul. Origen is an idealist; for him the soul is immaterial, a rational nature (φύσις νοερά) and in itself eternal. He finds the Greeks are in the main more akin to his thought than the Christians; for the Christians talked too much of the body and its resurrection, of physical torments for sin and sensuous enjoyments in heaven. But the Greeks make no provision for the resurrection of the body, not even for judgment and purgation in some cases; so Origen strives to work out a compromise, and it can hardly be a matter for surprise that the result was doubtful in respect of orthodoxy. As regards the resurrection Origen starts from the Pauline words "sown in corruption." Here the idea is that of seed, and the germinal reasons or seed-reasons are at hand in the Stoic doctrine. Nothing is required except to explain the soul as a principle of generation (seed) which embodies a law of production (reason or logos); it follows that as the seed dies in order to be quickened again, so the soul dies in order to live again; and in both cases death is not annihilation but only the cessation of one embodi-

ment which can in due season be followed by another. This distinctly brilliant piece of controversial dialectic is matched by another. Origen employs the Stoic "conflagration of the world" (ἐκπύρωσις) as a theory of purgation; this fire is like that which Moses saw, a fire that burns without destroying, a fire akin to the very nature of God, whose angels are as flames of fire. God is the fire that burns, but only the evil is destroyed in that fire; the pure are as the light that is not destroyed.

Origen believed in the pre-existence of the soul, but gives no explanation of the fact that in this life there is no memory of a former existence; he does not avail himself of the Platonic "reminiscence," but does maintain that the soul begins its life on earth burdened with sin.

This may seem to be far removed from psychology; but if the Christian views of materialism and immaterialism are to be understood these lines of development must be followed. It was not enough for Origen to assert immaterialism; he had to explain it; the other view can be seen in Tertullian. In his attempts to explain the materialistic phrases of the Bible Origen was distinctly an "advanced" thinker; the medieval ideas of heaven and hell were not so refined as Origen's doctrine of eternal love and eternal remorse. With these contributions to the religious view of the soul may be joined the striking view of inspiration which Origen took. Inspiration is for him true or false, that is, normal or morbid. The morbid type belongs to imagination and is simply a diseased fancy. There is beside this a normal condition in which people may have visions and may prophesy. This normal state belongs solely to reason; it is a highly developed state of intellect; the true prophet does not fall into a fit or give oracles during a state of catalepsy, but remains conscious of his acts and remembers them afterwards. Inspiration is therefore not ecstasy, it is not possession by a spirit

but the highest grade of self-possession. Origen is clearly not aware of the extent to which organic conditions give rise to inner states; the voice within seems to him to be always the voice of God speaking to the soul; reason withdrawing into itself has communion with divine reason. In this we trace the vein of mysticism common to the Platonising Christians; it involves a second life within the sensuous life, and beyond the material world another world in which there are sights that the eye cannot see, sounds that the ear does not hear. But Origen is singularly free from excess; his mysticism amounts to little more than an able defence of the reality of an inner life, the reality that is of reflection and of the insight into the meaning of things which comes from the earnest striving after truths that outlive sensations. Origen is thus one of the greatest writers on the psychology of religious experiences.

CHAPTER VII

MEDICAL INFLUENCES FROM ERASISTRATUS TO GALEN

§ 1. In the last centuries before Christ the seat of medical learning was in Cos and Alexandria. In the Christian era the most important medical theorists belonged by birth to Asia Minor and by naturalisation or residence to Rome. The change does not appear to have produced any marked characteristics in the various doctrines; the schools evolved their theories largely from observation, and there is a marked increase in the extent to which generalisations are drawn from experiment and the study of the human body. At the same time medicine retains a close connexion with philosophy; the great doctors were often explicitly attached to a school of philosophy, and where they professed independence often actually followed the lead of some philosopher whose theory of the universe formed a background to their special researches. Science had not yet attained a sufficiently departmental character to be cut loose from wider generalisations: men's efforts were divided between obtaining data for theories and supporting assumptions by misguided interpretations of the material provided by experiment.

An interesting example of the relation between tradition and discovery is furnished by the work of Erasistratus and Herophilus. These two doctors of Alexandria live in history as the discoverers of the nerves. So important a discovery might well have worked miracles in the treat-

ment of physiological and psychological problems. Finally it emerged triumphant, but at first it was obscured by the persistent doctrine of the pneuma. The distinction between veins and arteries had already been made by Praxagoras; the veins contained blood and the arteries contained the pneuma. The vessels thus filled by pneuma seemed to satisfy the requirements of a theory of perception and of the transmission of sensations to a central organ. They consequently made the functions of the nerves appear unimportant, and even the discoverers were somewhat uncertain of their facts. Erasistratus maintained that the brain was the organ of the soul and from it sprang all the nerves. He distinguished two kinds of nerves, those that serve for sensation and those that effect motion. Herophilus also supported the view that the brain is the soul's special organ; but he and Erasistratus differed as to the exact part of the brain. Herophilus also seems to have been vague in his ideas of the nerves which were at this time easily confused with sinews. In his view the soul was pneuma. He came accordingly into dangerous contact with Praxagoras, who supported the doctrine that the heart is the seat of the soul. Praxagoras held that the nerves arise from the heart and are fine ramifications of the arteries; which clearly shows how determined was the attempt to explain the nerves as vessels filled with pneuma. Herophilus seems to have employed the notion of musical rhythm to explain the character of pulsation, a fact that throws an interesting light on the condition of medical science at this time.

The failure of the theory of nerves is an example of the way in which great discoveries often arise. The facts were not clearly understood and their real significance was hardly seen. It was not merely that the pneuma doctrine held the field; the idea of the pneuma was a working hypothesis which by continuous manipulation

was actually made to cover the majority of the facts and was better understood; a vast amount of experimental work was required to establish the nerve theory in a form that could be equally definite. Prejudice still stood in the way of anatomy and the progress required could not be made. So long as theory preceded observation the pneuma doctrine prevailed.

§ 2. In the last century of the pre-Christian era the doctors who practised generally belonged to one of two schools, the dogmatists or the empiricists. Asclepiades stood in a class by himself; his disciples formed the school of Methodists. The greater doctors usually professed attachment to some school of philosophy; the majority were Stoics, but Asclepiades was an Epicurean. His Epicureanism does not appear to have been strict. It amounts in the first place to making the pneuma a material substance composed of the finest atoms; secondly to an assertion of perpetual change, for his "atoms" are in continual movement and are divisible. The corollary of this materialism is sensualism: the soul is really the activities of the senses taken collectively; reason is not a special faculty nor a specific part of the soul. If we remember that the orthodox view of the pneuma makes it a material substance extended through the body, and that the transmission of sensation from the periphery to the central reason (*τὸ ἡγεμονικόν*) was a standing difficulty, it will be clear that Asclepiades was not in fact far removed from the Stoic position, and created a type of eclectic doctrine mediating between Stoic and Epicurean. The most important school was that of the Pneumatists which arose in the time of Claudian. This school definitely attached itself to the Stoic theory and declared allegiance primarily to Chrysippus. The chief writer of this school was Athenæus, and a review of his position will give an

adequate idea of such parts of his doctrines as concern the present subject. He dealt with physiology, pathology, diætetics, materia medica, and therapeutics; his physiology is of first importance in this connection.

Athenæus accepts the general position of the Stoics: only the corporeal is real and the pneuma is the active element. Matter is divided by the possession of qualities into four primary classes or elements, the warm, the cold, the moist, and the dry. These are not the elements, because Athenæus will not presuppose elements, viz. earth, air, fire, and water; nor are they mere qualities; they are substances whose characteristic is the quality in question. This position gave trouble to Galen, who does not appear to have understood it; it is a purely empirical standpoint which bases the division of elements on the apparent qualities instead of deducing qualities from the assumption of elements. For the science of medicine this was important. The living creature is made of these material elements, which can also be regarded as causes or powers (*δύναμεις*). The warm and cold were regarded as active, the wet and the dry as passive; all that occurs in the body is a process of taking in or giving out which involves the continual adjustment of the qualities. The problems of food which increases, of drugs which decrease internal heat; the use of baths and of exercise which lead to the escape of humours through the pores (*διαπνοή*); these and many other things are discussed on the basis of qualities whose material embodiments must be kept in equilibrium.

The organism is made into a living unity by the pneuma, which as merely animal life is the animal spirit (*πνεῦμα ζωτικόν*). This pneuma is not acquired but connate (*σύμφυτον*); from it develops the internal heat (*ἔμφυτον θερμόν*) and it also assimilates the outer pneuma which is taken in by breathing. The pneuma and the natural heat are centred

in the heart; they are frequently regarded as almost identical. The pneuma has the three degrees assigned to it by the Stoics (ἕξις, φύσις, ψυχή); the ruling power of the soul is located in the heart. Upon the state of the pneuma depends the state of health; veins and arteries are filled with blood and pneuma; the only distinction is the proportions, the arteries having more pneuma. Physical condition is expressed in terms of the "tone" of the pneuma (εὐτονία πνεύματος) in much the same way as modern druggists speak of "tonics." Distinct from this formula for health is the formula for constitutions. A good constitution (εὐκρασία) depends on the normal mixture of the elements; any abnormal increase of one or more elements disturbs the equilibrium and produces disease.

Many other points could be mentioned, but they are of interest only for a history of medicine. The peculiarities of age and sex, the importance of different seasons, the difference of youth and age—all these depend on mixture of qualities. Climate and district have to be considered, because the quality of the air man breathes greatly affects his health; the moon also exercises an influence on the air. These features show how the idea of the cosmos was kept in close contact with notions about human welfare; "pantheism" as the Stoics understood it was capable of developing in cosmic views of body as well as cosmic views of mind.

§ 3. The development of the medical schools culminates in the combination of philosophy and medicine presented by Galen. As philosopher Galen is thoroughly eclectic; as physician he belongs to the Pneumatists. History repeats itself in Galen, for he appears as a second Hippocrates in character: his name has a similar significance in the history of medicine, he attained a reputation equally

stupendous, and round his writings gathered a similar accretion of spurious works and pious additions. It is obvious that Galen was one of the many who know everything about something and something about everything. Medicine was his business and philosophy was his hobby; it is to his credit that he did not dogmatise on ultimate problems and realised the extent to which philosophical conclusions are, for the practical man, matters of taste. Galen the philosopher should not be taken too seriously; if we start with his working basis as a physician and see what he makes of the human being as the subject of diseases, the philosophy can be added as a tribute to the reflections of a cultured man of science. Galen belongs to no school; he may be called eclectic if that is a correct term for the unattached thinker; he is at times Peripatetic, frequently Platonic, still more often Stoic, moderately anti-sceptic and violently anti-Epicurean. This combination of views is easily understood; the Pneumatist theory draws Galen toward Stoicism; his divergences from Stoicism are theoretical and due to the influence of his Peripatetic teachers; his Platonism is innate.

The physician regards man as a psycho-physical being; the mind of man is closely related to his body, and mental states can be deranged or rearranged by treatment of the body. Consequently the study of man begins from the elements out of which he is made, and with Galen, as with his predecessors, these are the four qualities which determine temperaments. Against Athenæus Galen maintains that qualities are not corporeal, but none the less treats them as bound up with matter, which was probably what Athenæus meant. Galen struggles against the monism of the Stoics and prefers to support the doctrine of four elements. The point is really of little importance, for the emphasis falls in any case on the qualities. Here

Galen follows the physicians of his school so far as the medical theory is concerned; his superiority lies in a wider treatment of the question. The Stoic philosophy influenced medical theory and medical theory reacted on Stoicism. There was consequently a growing tendency to think more of the body in its relation to the soul; the emotions afforded a middle ground, and the later Stoics formulate the control of reason over emotions as a practical science of control over the exciting causes; the passions and mental powers are seen to be closely connected with bodily states, and as passions are diseases of the soul that begin in physical causes, their cure lies partly in the treatment of bodily states. Galen completes the development in this line by taking mental, moral, and physical states as aspects of one life. Everything depends on attaining the normal temperament or that relation of qualities which constitutes the health of the creature. This is not one and absolute, but differs in different kinds of creatures and is the mean relative to the creature. According as one creature is better than another, e.g. man better than the animals, there is a relation of better and worse between temperaments. The normal temperament of the best creature is the ideal.

Before Galen's time the cardinal humours, blood, phlegm, black bile, and yellow bile, had been regarded as exhibiting specific mixtures of the elementary qualities. In Galen the combinations of the qualities were enumerated as forming thirteen types of temperament. A combination of the two positions produced at some later stage the popular doctrine of the Four Temperaments, which are distinguished according to the preponderance of one of the four humours. In this way the psychology of character was combined with the physiology of temperaments; anger, fear and hope became effects of the material constitution of the body. This view of mental phenomena

inclines strongly toward materialism. It is supported by the observed effects of wine and climate, and the fact that the Epicureans took note of these points is significant. Asclepiades had much in his favour, and Galen is anxious to show that the Epicurean is not the only explanation of things. Galen is not prepared to agree with Plato. If the soul is immaterial how can a physician explain the fact of drunkenness or madness ? On the other hand, he will not accept the doctrines that make it material. He is consequently left in a sceptical position and declines to make a final statement on the question ; he favours most a view of the soul which keeps close to the doctrine of temperaments and uses the idea of form. This theory runs somewhat as follows. If all things are to be classed as form or matter, Soul is form ; but form is only a certain disposition of matter ; and the soul must therefore be the mode of composition or the peculiar mixture of the corporeal elements. This interpretation of form completely destroys the substantiality of the soul as taught by Aristotle ; form now becomes merely the relation between corporeal parts. The objections which are made against Aristotle by later writers show how this view became common and passed as Aristotelian ; it differs but little from the view that the soul is a harmony or a name for the combined functions of the senses. As a form of immaterialism it was useless.

§ 4. The physiology of this period recognises three main organs of the body—brain, heart, and liver. The liver is the organ concerned in the production of blood from food and in it all the veins, i.e. blood-vessels, meet. The heart is the meeting-place of the arteries, i.e. vessels which convey animal spirits (*πνεύματα*). The brain is the source of the nerves : anatomy showed this, for when the body is dissected we find the spinal cord starting

from the base of the brain and sending out nerves, like branches, to all parts. The brain is not, for Galen, an expansion of the spinal marrow ; it is the origin or cause, not the effect. Brain and nerves can be further analysed into (*a*) the external membranes and (*b*) the inner substance, related to each other as are the bark and the pith of a reed. Of these the inner part is the true brain, the real seat of sensation and movement. The brain has, beside the outer rind and the inner substance, three parts, namely, the anterior ventricles, the middle section, and the posterior ventricles. The last are most important, for these ventricles prepare and store up the animal spirits.

Galen continues the tradition which recognises a connate pneuma and regards it as preparing the air introduced in breathing, so that all the acquired air is converted first into vital spirits (*πνεῦμα ζωτικόν*) and then by further refinement into psychic spirits (*πν. ψυχικόν*). The material thus refined is derived in part from the vapours of digested food; so that the production and the nature of the psychic pneuma depend on both the air and the food. Climate and diet therefore directly affect the rational powers, whether this pneuma is to be considered the soul itself or the organ of the soul.

The combination of physiology and pneumatology produces several points of doctrine. Each part has a particular constitution and a particular function. The distinctions of desire, temper, and intellect correspond to the physiological parts : desire pertains to the liver, being connected with nutrition principally ; temper is vitality, and belongs to the spirits of the heart ; intellect is connected with the brain. The nature of the individual depends on the relation of these three ; and the character of each " part " of the soul depends on the temperament of the part. Thus Plato's psychology is revived with additions.

The brain is partly soft and partly hard; the soft part is the cerebrum, the hard is the cerebellum; the nerves are similarly hard or soft according as they proceed from one or the other. Sensation is a matter of impression or passivity, movement demands activity; for these functions the soft and the hard substances are respectively adapted. Sensations may be either (1) accidental, arising from the inward parts and indicating their condition; (2) periodic, as of hunger or thirst; (3) effects of objects or the sensations by which we know external things. In this third class we have the sensations of the five organs of sense. In general, sense-perception is controlled by the condition that like is perceived by like. From the brain (or its extension the spinal cord) radiate the nerves which are adapted for sensation; they have a channel in which run the spirits derived from the brain. As the pneuma is one and flows out to all the sense-organs, it would seem as if any sensation might be obtained through any organ. The fact that this is not so is explained by saying that the pneuma is specifically different in each case. The eye-spirits (or pneuma of sight) are distinct from those of the organ of taste. The organ is in each case like the object (the eye-pneuma, e.g., is like light), and each sense-organ has in this way a "specific energy."

Following the lead of Chrysippus, Galen explains sensation as a dual process: first comes the impression which is a qualitative change in the organ; then the perception or consciousness of this change, which is the action of the brain. The nerves being extensions of the brain this perception arises in the nerves themselves: it is the reaction which the nerve, by virtue of its pneuma, makes in response to the stimulus. Here Galen directly opposes the older doctrine that sensation arises first in the central organ. The brain communicates its powers to the nerves which live with its life as the branches with the life of a

tree. This is one of the most important effects produced by the recognition of nerves.

Of the special senses touch, taste, and hearing require no comment. Smell is due to a substance that is vaporous and between air and water; as this substance is distinct from the four elements it explains why men have five senses though there are only four elements. The sense of smell is not located in the nose but in the brain; we must draw in the breath or we smell nothing. As regards sight, Galen adopts the Platonic view with slight alterations. The luminous spirits stream down the optic nerve channels from the anterior ventricles of the brain. The outer air in its contact with the nerve is modified so as to become identical in nature with the nerve, a sort of prolongation of the organ of sight; the inner spirits communicate their nature to the outer air as the sun communicates its luminousness to the atmosphere around it. Thus the eye reaches out to the object by this medium and attains a sort of mediated contact. By habit men come to think that they see things outside the eye, so that when an object in the eye hinders the sight this also is thought to be outside, e.g. specks floating " before " the eye or the illusions of delirium.

The nerves which serve for sensation are distinct from those that control movement. The former are soft and can receive impressions; the latter are hard. Galen makes a considerable contribution to science by distinguishing clearly nerve and muscle. The muscle has the power of contraction which is regulated by the nerve; for the nerve supplies the force. The brain is the source of movement, the nerve is the medium and the muscle the instrument. The distinction of hard and soft nerves is not, however, made absolute; some motor nerves are capable of sensation, and some sensory nerves grow hard and become capable of producing motion.

§ 5. It is not surprising that Galen should prove most successful in the sphere of psycho-physics. On questions purely psychological he finds decision difficult; he strives in vain to look both ways at the same time, and cannot explain how the soul exists without the body or how it can be anything wholly dependent on body. Under the term Reason, Galen includes all functions that are not intuitive or automatic; imagination, memory, and reasoning are the divisions of the intellectual life, and in the manner of the Stoics Reason is made regulative. An acquaintance with Aristotle leads Galen to recognise an immediate certainty in sensation and in thought; a perfectly clear idea is true. At the same time Galen's "reason" (*νοῦς*) is not generically distinct from sensation; the dividing line is not, as in Aristotle, drawn between sense and reason; there is no dividing line, and if imagination is called "rational" nothing is meant beyond the fact that it is not a sensation. Galen chooses to follow Aristotle's hint that imagination must be partly rational (*λογική*), and improves on this by dropping out the sensuous species (*αἰσθητική φαντασία*). There is no ground for dogmatic statements about Galen's intentions in this matter, but one point may be noted. After the Stoic developments increasing stress is laid on mental activity; sensation is drawn closer to reason by laying more emphasis on the need of attention in order to convert a mere affection of the sense-organ into an actual perception. At the same time reason loses much of its transcendental significance when it is seen that its material must be derived from the senses. While reason may not be sensation, it appears to be little more than consciousness of sensations and of the relations between sensations. Thus self-consciousness as the permanent condition of experience attains recognition and usurps the place hitherto given to Reason by those who spoke

of Reason as a unique and supernatural element in the human soul. With Galen the idea of self-consciousness is not fully developed, but in many respects its significance is understood. For example, consciousness of sense-affections is distinguished from the fact of sensation as mere affection of the organ. The complexity of some perceptions is analysed and shown to be due to rapid calculations added to the impression by the reasoning powers; in the perception of distance there is an element of habit which makes men think they see an object at a certain part of space; in the perception of movement there is a synthesis of perceptions, for the eye sees the object in a number of positions successively and thinks of it as moving. In both cases there is really a rapid inference which is necessarily a conscious process though not a process of which the individual is separately conscious. A modern writer might, with less accuracy, call it an unconscious influence.

Psychology here makes distinct progress though the ideas are not fully developed. A want of clearness diminishes the worth of suggestions that are none the less of considerable value. In the treatment of the will this want of clearness becomes more definitely a fault. Galen sees that voluntary and involuntary actions should be distinguished according to the presence or absence of intention. He classes as involuntary all natural movements, i.e. all activities that arise from sources with which reason is not concerned. These motions belong to nature (φύσις) as a non-rational power; such is e.g. the beating of the heart. Such actions as are not thus purely natural are under our control and depend on the activity of the understanding. It may happen that the mind turns elsewhere and cannot afterwards remember that it purposed any one action. The fact remains that no motion could have occurred if there had not been some previous in-

tention. It follows that some actions are due to purposes of which we are really unconscious, a contradiction which is perhaps due to the fact that Galen was ignorant of the nature of reflex action. In his division of actions as natural and voluntary he overlooked those that are involuntary and yet not natural in his sense of that term. The will is for Galen wholly dependent on the temperament and he is frankly fatalistic. He declares against the Stoics that all men are not alike, and believes that some are bad by nature. His ethical theory consequently has a practical trend, and he is able to agree with those Stoics who see in moral obliquity a proof of disease in the soul. For Galen the evil soul is a diseased soul, and as a patient requires a doctor so the vicious man must put himself in the hands of the good man for treatment and restoration to health. The source of evil is a disturbance of the condition of the organism. Desire and temper are the natural functions of the lower faculties, and are not bad in themselves. Only in excess are desires bad, and excess is due to the abnormal condition of the organs. In this Galen declares for Aristotle and a mean state; but his idea of a mean is formed after the manner of a physician's idea of a normal temperament. We do not condemn the beating of the heart because it is sometimes out of order; neither should we condemn desire because desires sometimes run to excess.

CHAPTER VIII

THE NEO-PLATONIC IDEA OF MAN

§ 1. PLATONISM is essentially an ethical doctrine and unites all its detail into a single theory of development toward perfection. Neo-Platonism starts with this idea, and its claim to be a revival of Platonism rests on the extent to which this ethical purpose is common to both. But while the outlines are similar the details are very different. The atmosphere of Neo-Platonism is at once more impersonal and more subjective. Plato diffuses an atmosphere of practical activity, and thinks chiefly of the good life as a system of human activities. Plotinus, the founder of Neo-Platonism, turns his eyes away from the world of change and action to the inner life of timeless meditation. For Plato the world that lies beyond the senses was a justification of human effort : it was primarily an answer to those who saw in life nothing but a ceaseless change that made effort vain and progress only a synonym for process. For Plotinus the supersensible is the spiritual world of the mystic. The years that intervene between Plato and Plotinus have slowly generated a distinction between the sensible and the supersensible world which is subtly different from that of Plato. The mysticism of Plato ends with an insight into the reality of life ; the mysticism of Plotinus begins from that point, abstracts the reality from life, and views existence as a state from which man strives to flee that he may depart from it and be with God. The change hinges upon the interpretation

of Plato. If emphasis is laid on Plato's idea of the body as the tomb of the soul; if contemplation is valued before action; if the whole process of education is regarded exclusively as a liberation of the soul, the origin of Neo-Platonism can at once be seen. The divergence of Neo-Platonism from Platonism lies mainly in the metaphysical view of intellect as a cosmic reason. The Stoic doctrine of universal reason had been really a veiled materialism; nevertheless its "pantheism" only required a fresh interpretation of reason to emerge as a theory of all-embracing intellect. If the pneuma of the Stoics is found to be an inadequate concept of the supreme unity, it is none the less true that it formulates an idea of unity closely akin to that of Plotinus. Neo-Platonism owes to the Stoics its conception of all embracing unity, of passionless reason, and of pure rationality as the human ideal. Plotinus objects to many of the details of Stoic doctrine, as he objects also to Aristotle; but his metaphysical doctrine is strongly marked with Stoic characteristics and Aristotelian notions. This Neo-Platonism is therefore no mere reproduction of Platonic doctrine. It is to a large extent an independent construction by reason of the new standpoint adopted. Plotinus has a new idea of the rational life as something distinctively subjective. Out of this arise his virtues and his vices; for it leads to a deeper view of thought and at the same time makes impossible that trans-subjective use of thought on which he builds a metaphysic not unlike the vagaries of Gnosticism.

§ 2. The metaphysic of Plotinus will concern us only in one reference, that of the relation between body and soul. The animal or animated creature is a mixed being, a union of soul and body. This union can be conceived in various ways. Plato spoke of the soul as imprisoned in the body. Aristotle made the soul a form or entelechy.

The objection to Aristotle's view is that it destroys the independent reality of soul; for if this "form" is a substance it must be a separate reality contained in that of which it is the form; if form is merely figure, e.g. the form of the axe is simply iron in such a form or figure, it ceases to be distinct from the matter; in other words, the soul is the matter. Aristotle, therefore, is rejected; the theory of an entelechy has all the faults of the theory that soul is harmony; they both destroy the substantial reality of soul. Plato's position is correct except for a tendency to separate the individual soul from the Oversoul. The truth will be seen if the question of division is understood. In the individual the multiplicity of parts becomes unity, because the soul is wholly in each part. The soul is therefore at once divided and not divided. If instead of the plurality of parts in one organism we think of the plurality of individuals in one universe, it will be clear how by analogy we can speak of all individuals as "parts" of one Soul, the World Soul. Again, as the soul is for the sake of Reason, Reason is prior to the soul and unity prior to Reason. Thus the first of all things is the One; for the Whole must come before the parts. And the One moves into Reason which contains within itself all other reasons or ideas. Reason produces Soul, primarily the World Soul, of which human souls are "parts." The principle of division is the matter; soul allies itself with matter, the lowest form of Being, and becomes differentiated or individualised through differences which belong to matter.

In this way Plotinus attains the following position. All degrees of Being lie between pure unity and multiplicity. The highest is pure unity which always contains all plurality; the lowest is the plurality in which unity is not realised. Between these two extremes fall the various degrees of unity which correspond to degrees

of consciousness. For the purposes of psychology this amounts to creating a scale whose extremes are body and mind; for body is plurality and mind is unity. From this follow two important conclusions. First, the main object of an exposition of the powers of the mind will be to show how they progressively realise unity in plurality. Secondly, the actual aim of all existence will be a return from the lower to the higher stages of Being, and this will be obtained by a purification of the soul which is essentially a realisation of self-consciousness leading to pure speculative thought. While on the one hand psychology becomes a study of self-conscious unity, on the other hand the science of conduct becomes a theory of the ascent through philosophy to pure passionless intuition.

The extent to which this theory lays emphasis on reason involves certain results which have to be recognised at once. Naturalism gives way to rationalism, and consequently reason takes the place of cause; the logical relations then supersede the physical, and the naturalistic method is contradicted at every point. If we ask how the One can become many and yet be One, the answer is an analogy; science includes many sciences and yet remains one. The generation of plurality out of unity is to be understood by the analogy of mathematics where the whole, e.g. the circle, is prior to the segments or the figures that can be described in it. If, finally, a difficulty seems to arise from the nature of extension, Plotinus clearly means us to regard extension as a property of the lowest form of Being and one of the ways in which the unextended unity expresses itself. The mind comprehends extension without being extended; quantity is therefore a category which the mind has, but not a category under which mind can be brought. It is the way in which Being is apprehended. All Being when truly regarded is regarded from above. The mind comes

down upon things from above; however difficult it may be to abstract oneself from the apparent solidity and plurality of things, the supreme duty of man is to abstract himself from the world of things and dwell in a world of rational forms, a system of unextended thoughts which has produced all phenomenal reality.

Into the value of this metaphysic it is not necessary to inquire. Plotinus is content to accept ground for cause and logical dependence for natural production. As Platonism taught the possibility of ascending to a synoptic view of all reality under one concept, Plotinus has merely added the idea of matter as inside rather than outside the unity and thus " transcended " the dualism of matter and form. Aristotle's doctrine of the active reason doubtless helped him; still more perhaps did the Stoic monism and the Stoic doctrine of interpenetration of matter by the pneuma. Nothing but a more determined use of the idea of unity was required to convert these doctrines into the mysticism of Plotinus. The way in which this was achieved will be seen in some of the points now to be discussed.

§ 3. Man is a mixed form of being. This mixture is a divine mystery but none the less to be accepted; man is soul and body, one and many. The method to be pursued in psychology is the introspective method which analyses the forms of mental activity. The lowest of these is sensation which borders on mere plurality. For sensation a soul is required, and the exact nature of the soul must be defined. The doctrines of harmony (Aristoxenus) or entelechy (Aristotle) are rejected. The soul must be one and self-subsisting. As the soul is that which produces unity it cannot be itself the product of a mere aggregate, an argument which disposes of atomism. It is not possible for the inanimate to produce by mere

combination an animated whole: the lifeless cannot produce life; consequently any attempt to generate a soul out of a complex of material elements necessarily fails. The doctrine of the Stoics is no better than that of Epicurus. If the soul is defined as pneuma or intellectual fire (πῦρ νοερόν) it must none the less be a pneuma of a particular kind or having a particular mode of being. Then the question arises what is the kind of pneuma which is specifically called soul, and what is that mode of the pneuma which makes it a soul as distinct from the species of pneuma which are not endowed with soul (πνεύματα ἄψυχα). The question itself shows that the mode is all-important; it is this that must be explained; and if the explanation of the mode (σχέσις, πῶς ἔχων) is the explanation of the soul the use of the term pneuma is invalid; the soul is but a species of pneuma, for, if it is pneuma at all, it is in essence wholly unlike any other pneuma. This somewhat formal refutation is in Plotinus secondary to the contention which really supports his conception of an immaterial soul. The soul in his view is the condition of our knowledge of all things material; to explain the nature of the soul as material is therefore to explain it through its idea of matter, through that which is itself dependent on the soul. If we consider the activities of the soul we see that its effects are not material, it has no quantitative changes, it produces unity in our perceptions and it can comprehend that which is not quantitative (e.g. justice). All these are functions which do not belong to matter, and justify us in regarding the soul as immaterial. Plotinus thus takes up a position strongly idealistic, and adopts a definite conception of psychology as a science of conscious life. In Plotinus, for the first time in its history, psychology becomes the science of the phenomena of consciousness, conceived as self-consciousness.

Of all the phenomena revealed in consciousness the most important is that of unity. This is exhibited in the first instance in man's physical unity; the affections of the different parts are known by the soul; they are therefore at one and the same time in the part and in the soul. This involves a difficulty. The body is extended and divisible; are we to say that the soul is equally extended and divisible? If so, it will have parts which are simply placed next each other, and the affection of one part will be known in that part only. As experience shows us that it is not the finger that feels pain but we feel the pain in the finger, it has been generally said that the feeling is transmitted to the central self. But what is this transmission? If the feeling is handed from part to part we must experience a feeling in each part and not one but innumerable feelings occur all along the line of transmission. As this is not the case, it is necessary to say that the soul is wholly in all parts. This relation of soul to body is the central mystery of our dual being; it is a necessary conclusion which is not further explicable: the composition and unity are unique and even the assertion that this is a "mixture" is not accurate. Suppose we describe a line as white, can we call this a mixture? Can we say that the whiteness is straight? Obviously not; the elements are *essentially* different and have no predicates in common.

Thus Plotinus rejects the Stoic doctrine of pneuma and also the idea of a central reason (τὸ ἡγεμονοῦν). His own belief is that the soul is a reality belonging to a higher degree of Being than matter. The soul is that which has life in itself and gives life to the organism: it is immaterial and envelops the body; it is more correct to say that body is in soul than that soul is in body. The relation of soul to body is expressed by Plotinus as a form of collateral existence. Soul does not mix with

body, but dwells beside it (πάρεστι), and either goes forth to it or withdraws from it. The One has descended, inexplicably, through soul to body; the soul consequently is a form of Being higher than that of body, and will move toward it or away from it according as it sinks or rises in the scale of Being.

To understand the position of the body in the scale of being we must revert to the metaphysics. The order of production is in a descending scale from the highest Unity, which is also the highest Being, to the last form of being, the lowest and the worst. The return which Nature strives to effect is a return of the lower to the higher, of the formless to the more formed, of the disconnected aggregate to the self-conscious Unity. At its lowest stage form is expressed as a definite and persistent disposition of parts (ἕξις). Nature thus begins her work in the inorganic; and, as all form is of the nature of rational being, the inorganic partakes of reason, i.e. order or rationality not conscious of itself as such. The cause of all parts must ultimately be sought in the One which (logically) precedes them and always comprehends them. The secret power by which even the inorganic arrives at Form proves that the Soul of the Universe is at work in it. The lowest forms of being depend most on the Universal in which they live and move; when matter attains a higher form in plant or animal it acquires an independent power of production: the universal soul creates within itself other productive agents. That form of matter which has attained a sufficiently high level of being to constitute a body receives a soul which coexists with it. Soul and body are thus united substances, never mixed or fused, but always remaining in a relation of "assistance," co-operating but not consubstantial. It is extremely important here to observe that the term body takes its meaning from the unity: it is matter that

precedes the unity; but, as we know it, body is matter endowed with qualities which are the effects of its relation to soul. Motions of the body are therefore describable as motions of matter; for body is the soul's medium.

What has already been said about production and the scale of being explains Plotinus' view that the soul's connexion with the body is a descent: its association with matter is a degradation even though it is not wholly occupied in the mortal life. It cannot, however, be placed in immediate contact with the body; its union requires a mediating element, the Pneuma; in this the soul clothes itself before putting on the garment of flesh. This aerial garb is given to man by heaven and the stars, a body of the nature of fire in which the soul dwells and through which it moves the body.

§ 4. Sensation is defined as the reception of forms in the matter which accompanies soul. It is the process by which forms are placed at the disposal of the soul (*παραδοχὴ εἴδους*). Knowledge is always an activity of the soul; sensation as such is not knowledge, but a condition for the attainment of knowledge about material things.

The independent character of the soul appears still more clearly in the sphere of knowledge. The soul uses the organs of sense as its instruments; it is itself unaffected; external impressions are made upon the sensitive soul by objects, but these impressions involve no self-recognition, no consciousness. The impressions are stored in the affective soul (*τὸ παθητικόν*) until the cognitive soul turns toward them and chooses to behold them. Plotinus here modifies the Aristotelian tradition. He deprives the senses of any function but that of transmitting forms which are the potential objects of cognition; the assimilation which Plotinus requires as the connecting link between the object and the thinking soul is represented

as a modification of the passive sentient soul (the passive idea). All perception is itself an activity: the passivity implied in the soul's dependence on objects for its material results only in the deposit of forms in the receptive sensitive soul. When the soul exerts its activity and turns towards the things of sense it perceives (ἀντιλάμβανει, ἀντίληψις); this action may be described as facing toward the external world. The organs of sense are the means which the soul uses for this purpose. The soul is, in respect of its nature or substance, one, but in respect of its functions it is manifold. The body has parts, and to each part is assigned a different function, so that hearing can only take place by the ear, seeing by the eye; hence the soul is compelled to relate itself to different organs for the purpose of attaining what is given by each organ of sense. Though the soul is indivisible and therefore we say it is wholly in every part, this necessity produces a distinction if not a division, and creates the plurality of sense experience. The whole body is an instrument in the case of touch or movement, but the special organs of the other senses are the parts most adapted to the functions of sight, hearing, taste, and smell. The body also is the instrument of motion. The nerves, which begin from the brain, serve both for sensation and motion according as the soul uses them. Hence the brain is the most important part of the soul and reason has been placed in it, not because reason actually resides there, but because that is the point at which the immaterial reason comes into contact with the material organism and the sensuous soul. Plotinus here accepts the doctrine that desire is connected with the liver, spirit with the heart, and the deliberative reason with the head. This distinction of parts is analogous to that of the senses; it is a distinction of the instruments used for the various purposes, and only affects the soul in so far as it

turns to one or the other to produce the effects required.

Plotinus adopts Aristotle's doctrine of sensation as a faculty of discrimination, and of imagination as resulting from sensation. These belong to the calculative reason (τὸ λογιστικόν) and form a group of lower functions. Aristotle's description of imagination as partly a residuum of sensation and partly a rational function, serves for a transition from the lower to the higher activities of the soul. For memory is superior to sensation in the following way. Sensation is an activity common to soul and body; the soul is the agent which uses the body and in this case cannot perform its work without the body. Memory is not common to soul and body in the same way. As an example we might compare the soul to a weaver who cannot weave without instruments, but can think about weaving when the instruments are not at hand. The soul is independent in its actions, because even in sensation it has acted and not been merely passive. If the sensation left behind a definite impression, such as that of the seal on wax, these impressions would be required as material for the soul when it remembered anything. But this Plotinus denies. In the sensation the element of knowledge is due to an activity of the soul; hence that which remains, when the soul ceases to have an object before it, is the fact of having acted in a certain way. Memory then is simply the soul's power of knowing its own former activities. This seems to be proved by the fact that we have memories of activities which were not sensations, memories of thoughts themselves; and this could not be if memory was only a storehouse of impressions. Moreover, we remember that at a certain time something did *not* happen; how could this be if memory was always of sensible effects? Memory then depends on forms (τύποι), but forms are not impresses; they are modes of activity

directed toward sensation rather than derived from it. Memory of that which did not happen is memory of an activity which failed to reach its object; clearly there could be no memory of an object that failed to reach the soul.

For Plotinus the subject of memory is a cardinal point. With the most penetrating insight he saw that all attempts to explain it as an after-effect of sensation were fundamentally wrong. Memory is simply consciousness viewed in extension : it is self-consciousness expanded into a time-series. All consciousness is in a sense self-consciousness : it is the self that makes unity, and unity is the essence of consciousness. Memory stems the flow of things, puts an end to the flux of the material world. It does this not because some one idea comes to a halt and survives the ebb of events, but because in it the soul is made manifest and the soul abides. Memory is the first clear proof that consciousness is not merely a complex sensation, an impression as temporary as the relation to which it is due.

Memory, then, is a state which may be described as an affection of the soul apart from the body. The body may assist or hinder the soul in its efforts, but the body does not itself remember in the proper sense of the term. Being a kind of thought and distinctively a mental activity it belongs to sensation rather than feeling. Feelings leave traces, and there is a certain cumulative tendency in feelings which amounts to a propensity ; this is an obscure form of retention which occurs below the level of conscious unity. Even with sensation the bond is not close : people who have good memories for facts are often bad at recalling sense-experiences ; and keen observers are not always good at remembering. Here the doctrine of imagination helps : it is the imagination that preserves the idea for a longer or a shorter time after the

object is removed; it is accordingly the true condition of memory. Imagination has a twofold function: it preserves the forms which constitute sense-knowledge and it is the mirror of thought. The activity of the soul is involved in all actual perception. When the soul turns toward the material world it makes use of the images derived from sense-impressions. But the soul may also turn toward itself and its own content; it may make its own thoughts an object to itself and not only think but apprehend its own thoughts. This it does by means of the imagination, into which it projects its thought that it may make it the object of other thoughts.

§ 5. Such is the nature of memory and such the uses of imagination. The doctrine of the dual imagination (sensitive and intellectual) leads up to an analysis of the process of thinking. The soul has three main types of activity: it may turn to that which is lower (matter and the senses) or toward the life within or toward that which is above it, Reason. In the first of these activities the soul performs the functions which do not involve reason (sensation and nutrition); in the second it produces discursive understanding which involves memory, ideation, and the lower forms of will and love; in the third it realises unity with the divine in the forms of pure thought, in will and in love. In this Plotinus follows the lead of Aristotle with one significant change: Aristotle's list (nutritive, sensitive, rational) really duplicates the highest term and gives a dualism within the sphere of reason. Plato had also indicated a similar dualism. Plotinus thrusts sensation into the lowest part; classes understanding more closely with memory, and leaves the reason to form a separate and distinct class of activity. Another difference is to be found in the explicit recognition of a soul even in things inorganic, and by analogy a reason even in the (relatively)

irrational part. This is a Stoic element woven into the web of Platonism and a necessary consequence of the doctrine of unity which abolishes any ultimate opposition of matter and form. Within the limits of psychology the three activities of soul are perception, reflection, and contemplation. The first is apprehension of effects produced by sensation, attention directed to the affections of the passive or irrational soul. Reflection or discursive thought is a kind of inner dualism, a spontaneous dividing of the conscious state into subject and object. In this the soul thinks and knows that it thinks. In the pure activity of thought there is no such dualism ; the reason is then occupied with the eternal and changeless : the changeless has no before and after, consequently no time and no memory ; for memory involves sequence. In this contemplation of the eternal the soul comes to rest and does not move out of itself as it does in reflection. Here, indeed, Plotinus seems to formulate the doctrine that to have the same state of consciousness continually is to be unconscious ; but so far from admitting that this unconsciousness is a negation he makes it the most positive of all conditions : it is the highest and best state of the soul, its final and complete unity which is attained by pure contemplation of the One. This passionless contemplation being the ideal state toward which man strives, it is necessary to inquire into those disturbances of the soul which prevent its attainment. Thought in its highest form is passionless : it has certain refined forms of feeling such as pure love, but none of the motions which belong to the body can be transmitted to the rational soul ; they reach only to the irrational or affective soul. For his physiology Plotinus relies partly on Plato, partly on medical writings. The vital functions he ascribes to the powers inherent in the blood which is contained in the veins : the veins start from the liver, which therefore has a direct connexion with

emotional states. For arguing, in the style of Plato, from the flushing of the face in anger and similar expressions of the emotions, Plotinus makes the liver the seat of the desires (τὸ ἐπιθυμητικόν), which include all impulses which lie at the root of endeavour, whether for food or self-preservation. Plotinus thus practically identifies spirit and desire (τὸ θυμοειδές and τὸ ἐπθυμητικόν), regarding spirit as relative to the nature of the blood, since the quick-tempered are the "hot-blooded" people. With desire and fear are associated the movements of pursuit and aversion which imply a higher activity conscious of, but not disturbed by, the actual affections. The fact that pain or pleasure is a disturbance of the part affected, whereas right judgment about pleasure and pain demands an unmoved intellect, leads Plotinus to a rather striking analysis of emotions. The affections of the composite self may be divided according as they arise from without or from within, the former being due to external agency (as in receiving a blow), the latter to internal agency (the cravings of nature). In both cases there is a disposition of the animated whole. Since it is localised and we say the pain, e.g., is in the finger, the cognitive soul cannot be that which is affected, else we should say that the soul was in pain. Moreover, in a condition of pain or pleasure we determine upon a course of action; and this is not the function of the sensitive soul. The only possible conclusion, therefore, seems to be that the lower soul has the state or condition in question; the pain or pleasure is properly a knowledge of that condition, which coexists with the idea of some other condition better or worse. Thus there are really three elements in all pain or pleasure: there is the bodily disposition, the change which the body undergoes; there is the feeling in the sensitive soul which is pleasant or painful when the bodily change increases or decreases the

unity between body and sensitive soul; while outside both, but coexisting with them, is the knowledge of these changes and their significances. Here as usual Plotinus has succeeded in working out an analysis in three terms, of which one is intermediary. All emotions (pain, pleasure, fear, anger, desire) belong to the unity which consists of body and sensitive soul, in other words, the animated body. But body never affects soul; the movement of which these are species is a movement produced *by* soul, never produced *in* it; so that all activity springs from the soul. The soul is not moved in the sense in which body is moved; so that ultimately the expression of the emotions is a corporeal movement produced by a motionless agent. As in the genesis of all lower from higher forms of being there is a going forth which neither affects nor detracts from the higher productive agent, so in the emotions all motion takes place in the material sphere and begins from higher states, such as opinion, which are themselves not states of motion. The typical case is that of blushing, which is a corporeal effect of the opinion that an act is shameful. Here Plotinus reaches, as a product of his introspective method, the first statement of the idea of self-consciousness. He has noted, too, that consciousness of self declines when the mind is most intent on its external object; while feeling and thought vary inversely. For Plotinus the stage of self-consciousness was not the ultimate goal: it may even be doubted whether he grasped the significance of the idea; for it is with him only an intermediary stage between consciousness of objects and the final unity which has no distinction of subject and object.

CHAPTER IX

ECCLESIASTICAL WRITERS FROM TERTULLIAN TO NEMESIUS

§ 1. TERTULLIAN'S treatise "De Anima" begins with a reference to a previous treatise, the "De Censu Animæ," in which he claims to have proved that the soul is not material but is the breath of God, the *afflatus Dei*. From these writings we learn that Tertullian regards man as by nature dual, a being composed of flesh and soul. The soul is also dual, being at once a vital principle (ψυχή) and a rational principle (νοῦς). Man is animal, animated, in virtue of the soul (ψυχικός); and also spiritual (πνευματικός) in virtue of his share in the spirit of God. The soul is superior to the intellect, for the intellect is its servant, the deputy through whom it does the work of feeling and motion.

In opposition to Plato, Tertullian asserts that the soul has a beginning: on this point the Bible is decisive. In agreement with the Stoics, he maintains it is corporeal; he disagrees with the theories of Thales, Empedocles, or Epicurus; and with Critolaus, quoting the Stoics as his real predecessors. The main argument for this position is the fact that afflictions of the body are felt by the soul, and the soul moves the body; this interaction between soul and body proves that the soul is corporeal. To the objection that only an incorporeal entity can know the incorporeal, Tertullian replies that we know what is incorporeal (e.g. colour) by the corporeal senses. The soul is not nourished by incorporeal substances (e.g. truth),

but depends on corporeal food, else "what is to become of the souls of all those robust barbarians, which have had no nurture of philosopher's lore?"

As evidence that the soul has extension and is corporeal Tertullian quotes (*a*) the Bible accounts (e.g. the story of Lazarus) and (*b*) visions of the inspired; for some persons have seen the soul with the eye of the spirit, and hence revelation shows that it has figure," it is soft, transparent, and of an ethereal colour." The mind is a function of the soul: it is like the soul in being capable of suffering, that is of experiencing emotion, passive rather than impassive. The soul is like the wind in an organ, not divided but distributed through all the parts; and it has its seat in the heart. Though actually simple, the soul has a rational and an irrational part, the latter infused by the devil.

In addition to this theory of the nature of soul, Tertullian expresses some opinions on its functions. He maintains that the senses are not by nature fallacious; neither are they inferior to intellect as regards the attainment of knowledge; the superiority is in the objects, not the faculties. Man has freedom in willing, and his nature is capable of change; these two points are implicated, for the Valentinians maintained that there were in the souls of men germs or seeds such that life was nothing but their unfolding, the pre-determined evolution of an unchanging essence. Tertullian maintains against this a development dependent on surroundings and actions, the real self-development of a free-agent. The soul is never separated from the body; it is always coexistent with body though different in nature. As a deduction from this Tertullian says that sleep affects only the body: it is a suspension of the senses during which the soul remains active. Similarly after death, when all bodily functions have ceased, the soul by nature immortal, con-

tinues in a life of its own. Tertullian's psychology culminates in his theory of sleep and dreams. Sleep is the image of death, and awakening the image of resurrection. In sleep the soul has temporary freedom as in death it has eternal freedom from the body. But Tertullian seems hopelessly confused as to the nature of dreams: they are classed according to their sources which are the act of God, the act of devils, intense application of the mind, or the state of ecstasy. From this account the soul seems subject to external influence in the first two cases; in the third the ceaseless motion of the soul seems directed by previous habituation; in the fourth the activity is undirected. Ecstasy is akin to madness: the sensuous soul then stands out of itself; and this is the psychic condition of the prophet in his inspired utterances.

§ 2. Lactantius depends for his psychology mainly on the Stoic theories. He does not exactly subscribe to any doctrine, and obviously selects that which will harmonise with his ethical and religious views. The main lines of treatment are dictated by metaphysical presuppositions: the selection of such points as do receive attention is controlled by the end in view. The psychology produced by such influences can hardly be an important contribution; but here, as elsewhere, we find among the Fathers that interest which keeps alight the torch of knowledge, and the process of sifting to which the Greek doctrines were subjected by writers only partly in sympathy with them, effected a continuous purification.

Lactantius starts from a dualism which is common to the world and to man. The powers of Light and Darkness, of Good and Evil, rule the Universe and wage continual strife. God created matter; he is not the form that struggles with an independent chaos or matter, but

the Creator of a universe which he himself made dual. In the heavens is the dwelling-place of light, life, and the heavenly bodies : in the earth abide darkness, death, and the things created from earth. To this dualism of heaven and earth corresponds the dualism of human nature. In man heaven and earth meet because he is at once soul and body, the breath of God and the elements of earth. The conflict in the macrocosm is reduplicated in the moral struggle ; soul strives against body as good against evil : the prize of victory is ascent to the realm of light, while defeat means descent into darkness. There is a trace of prejudice in this doctrine ; for it is a battle in which only one side can secure victory ; the triumph of darkness is not a victory but the defeat of man ; and thus it is tacitly assumed that " man " and " soul " mean the same thing. The strife is between the parts of man considered anthropologically or physically ; from the ethical standpoint it is a strife of man against evil, of the self against the not-self. Here as often in ethical writings the true self is identified with the will to be good : a more unprejudiced view would have to admit that the self might not be the good will ; a purely psychological view could not start with these ethical and religious presuppositions.

Lactantius assumes the reality of the soul and declares it to be incorporeal and imperceptible by the senses. The soul is not the blood, nor the " fire " of Stoicism, nor the air of other writers. It is a heavenly thing—a spirit like unto God, and so akin to light and fire. The spiritualism of Lactantius is modified by the fact that he desires to define the substance of the soul. In doing this he drops into the method that inevitably leads to some form of materialism, and, in fact, allows himself to use the language of Stoicism. The theorist who turns away from the functions of the soul to its substance, from thought to matter, cannot avoid framing his definitions

in terms of sensible matter; a "spiritual substance" can only be spirit in the sense of pneuma so long as it is conceived as being primarily a self-subsisting thing.

Every soul is created by God. There is, therefore, no possibility of pre-existence: the Pythagorean view is rejected, as also is the Epicurean idea of a soul formed by coherent atoms, and the Stoic idea of inherited souls. Lactantius definitely maintains creationism. The soul is unity and on it depend all the activities of the living creature. By it we live and breathe and grow; by it, too, man thinks. The distinction of soul (anima) and mind (animus) is not an assertion of parts of the soul, but only a distinction between physical and psychic activities. Lactantius adopts none of the theories that speak of "parts" of the soul; he will not accept the Platonic tripartite division or even the distinction of a rational and irrational part. While the soul as anima can perform all the functions of life, its essential work is the intellectual activity. In this there are degrees: it increases and decreases as man grows from childhood, through his prime, to old age; the idiot has no intellect; in sleep the mind rests and in syncope it loses all power. From this it appears that the soul is to be regarded as having a capacity for thought which is subject to increase or decrease, though the soul remains itself unchanged; the natural functions are its lowest activities and the intellectual its highest. In agreement with this Lactantius speaks of animals as being distinct from man in degree: man alone rises to the heights of reflective thought and religion; the animals have traces of other activities such as emotions and instincts, but not of the power that attains to a knowledge of God. In man the seat of the soul is said to be the whole body, though the thinking soul is in the head. The choice of the brain rather than the heart is based on the fact that the organs of sense are

in the head ; touch being common to all parts of the body indicates that the soul is in some sense extended through the body, while the " absentmindedness " of reverie may be due to the withdrawal of the mind from the head to the heart.

Lactantius makes the mind essential to all processes of perception. Their ground is attention which is mental activity. Motion is the essential character of the soul ; against the Stoics he maintains that a motionless state of the mind is equivalent to its destruction. In dealing with the senses Lactantius employs a false teleology ; he says, e.g., that man has two ears in order that he may catch the sounds from both sides and the ears grasp the words and prevent their form being lost. He thinks of the sense-organs as instruments which the mind uses. The eyes are windows through which the mind looks. The fact that two eyes give only one object is explained from the fact that the mind is a single thing : " seeing double " is a result of the cessation of mental activity, e.g. in drunkenness. It occurs also when the object is too near so that the mind cannot use both eyes at once. While it is the mind that sees, Lactantius is assured that the eye is a necessary condition ; he is therefore not troubled by the objection of Lucretius, who thought that if the mind was the true agent in vision it would see better without eyes. One organ, the tongue, has a double function : it subserves both taste and speech. Speech is the interpreter of mind and a primitive possession of man. The naturalism of Epicurus is rejected. Lactantius has no interest in the mode of attaining knowledge and no theory of perception. Truth is ultimately the gift of God, and man attains it only when he is taught by God. The emotions being more closely allied to ethical interests, receive more attention. Affections belong to the soul as the senses do to the body : they are movements of the soul, and the term includes

practically everything that is not sensation or thought. Lactantius gives no classification of these affections, but divides them in a novel manner into those which are possible to God and those which are not : anger, graciousness, and sympathy are those which pertain to God's nature. Lactantius calls affections motus animi, but not perturbations. In this he purposely contradicts the Stoic view ; he also opposes the Stoics in his judgment on emotions, for he regards them as natural tendencies and not diseases of reason. As natural forces they are not to be rooted out ; for virtue would also disappear in that case since virtue is the right control of impulses. Lactantius makes a point against the Stoics when he says that what they reject under one name they accept under another ; he also rightly says that there is no profit in condemning desire and then praising the will : it is better to desire the good than to will it without desire. Against the Peripatetic doctrine Lactantius argues that moderation is not virtue : not the strength but the end of a feeling is the measure of its moral quality ; he who runs in a wrong direction will not get to the right destination by merely running more slowly. The Peripatetics erred primarily in thinking only of this life ; affections are primarily to be considered in connexion with the life hereafter. The proper use of all emotional forces is the furtherance of the good life ; some that have been reckoned vices are in this view to be regarded as virtues, e.g. fear is a virtue when it is fear of God. Desire and anger can be justified when regarded as the power to obtain what we need and protect what we have : sympathy is not weakness but a bond of unity among men.

The human soul differs from that of the animals : animals have only a principle of life while man has a divine spirit. The animal soul comes from the universal air or ether and is dissolved in death ; the human soul

is made by God and is capable of immortality. The soul is not immortal in itself; a life devoted to bodily pleasure ends in death for the body and eternal death for the soul: a righteous life earns eternal life hereafter. This conditional immortality is represented as a life of the spirit alone by itself: the body ceases and all its organs; but the soul can still hear and see and feel; the human form remains, for in the resurrection each one comes to judgment in the earthly form. With a peculiar touch of Stoicism, Lactantius declares the souls of the just are free from all feeling of pain: their existence is passionless. On the other hand, the eternal death of the unrighteous consists in perpetual endurance of torments. The arguments by which immortality is established belong to the spheres of theology and ethics: they form an answer to the views of Lucretius, and follow naturally from the totally different view of the soul taken by Lactantius.

§ 3. Gregory of Nyssa discussed the nature of man in more than one work and from more than one point of view. While it is true that "he discovered little and added little to the discoveries of others," his work takes a prominent place among Christian treatises of this period. Gregory is in a sense eclectic; his material is obviously drawn from earlier sources; but what he adopts he chooses with reference to a fixed doctrine which is not the outcome of his studies, but was previously acquired and established. Philosophy is the handmaid of theology, science is subsidiary to revelation; and thus what is good in either may be used to fill out and complete that knowledge of the truth which is contained in the Scriptures. The main element then is the Christian doctrine: Plato and Aristotle supply further material; while medical theories affect the interpretation of some points in the case of the physical life. A combination of elements so

divergent requires no little ability; how far Gregory was equal to the task will be seen from the results.

The first point to decide is man's place in the Cosmos. God is uncreated, eternal, incorporeal, an intelligible nature; he is pure Being and the true God, from whom proceed all created things. The created universe is the work of Divine Will, and includes intelligible and sensible natures; the former are the pure spirits or angels, the latter the visible world and all it contains. This world was created in one act of will, but only as a potential system: the diverse forms of being arise out of this by a process of development analogous to the unfolding of latent powers in the seed. Between the intelligible nature and the material or visible world is a gulf that cannot be crossed: God as pure spirit cannot come into contact with the material world directly; an intermediate nature was therefore created as a link between the intelligible and the sensible, and this is man. Man is thus the mediator between God and matter, the link between intelligible and sensible natures: the final cause of his existence is that matter may not be wholly divorced from divine goodness, but may have the power of turning in some degree toward God.

The human being is a cosmos in miniature, a mixed cosmos having kinship with both parts of the larger cosmos. As a material organism man is compounded of the terrestrial elements; so also are the animals, but in a different degree, for there are degrees in the natural world and a scale of perfections. Man is the highest of those degrees. The scale includes the inorganic and the organic; the organic has three grades—plant life, animal life, and human life. The characteristics of these are vital powers, sensation and reason respectively; the last being different in kind as well as degree from the two former. Gregory here meets the difficulty which is

inherent in the Greek doctrine adopted by him. He is not prepared to count reason as the highest form of natural powers; it is something distinctly supernatural, and the apparent continuity of development ends really in the assertion that the highest form of natural development is not reason itself but the condition for the attainment of reason. Reason can only be understood from the other, the divine side of the Universe. Nature does not produce it, but it comes down to the natural constitution. Mind is therefore described as the image of God, an incorporeal, invisible, intelligible nature resembling its archetype: it is not substantially the same as the mind of God, but only identical in properties or qualities. Man as created must be wholly different from the creator, but Gregory finds no little difficulty in explaining how human reason can be at once essentially like and essentially distinct from divine reason: it is sufficient to say that he is set against Pantheism and defends his position by subtleties such as are usually evolved to meet crises of this kind.

The soul is invisible but can be known through its effects, for the organs of sense become useless without a soul. The soul uses the senses to acquire knowledge, and can obtain through them knowledge which transcends the mere activities of sense; we cannot see the real size of the sun, but we can arrive by thought at the truth which the senses seem to contradict. Mind is simple and a unity, though its functions are complex. Thought in general is a motion or activity of the mind, and thoughts can be classified as speculative or practical; thought and will are thus regarded as species of cognitive action. Gregory appears to use thought (*διάνοια*) as a term for consciousness in general, while the rational power (*νοερά δύναμις*) is a species of thought along with the productive power (*ποιητική δύναμις*). This classifica-

tion is neither that of Aristotle nor the modern "active and passive powers," but simply a recognition of the difference between contemplative and purposive thinking, both being active powers.

The human mind is so constituted as to have a faculty of receiving divine influences and a tendency to seek after God; the idea of the good is in the human mind as an innate power which expresses itself in all effort after fuller being; the instinct of self-preservation is itself a seeking after God. But this must not be interpreted as blind instinct; the attainment of the good lies always in the exercise of choice and of free will; not by blind necessity, but by conscious choice can virtue be realised in man.

The union of this simple intelligible substance with the gross matter of the body is a mystery which can only be partly understood. Owing to its nature the soul cannot be localised: it is not in one part of the body more than another but penetrates the whole; as it is immaterial, it cannot be spoken of as extended, and must be regarded as dynamically present to the whole body. The rational nature is not equally present to all parts of the body because the body is not equally adapted in all parts to receive it. The higher nature uses the lower as its vehicle; in matter resides the vital power, in the vital dwells sensitive power, and to the sensitive power is united the rational. The sensitive soul is thus a medium, purer than flesh and grosser than the rational soul. The explanation of the union of diverse natures by the discovery of a medium was a vice that seems to have been widespread at this period. It was a "metaphysical" principle; God required a mediator between himself and man; reason required a mediator between itself and matter; every pair of opposites required a tertium quid, and there was no natural limit to the number of mediating natures.

The satisfaction of the author was the only regulating principle; in this case Gregory was satisfied that the sensitive nature was the link between matter and reason. He improves the point by showing how excellent the arrangement is; only thus could the sense-nature attain its perfection and the organs of sense are so obviously prepared for their uses!

The soul thus united to the body is the real source of all activities. At this point Gregory falls into the pit which he has been unconsciously digging for himself. On the one hand, the superior nature of the rational soul is the reason for saying that it rules all and that all is dependent on it; on the other hand, it becomes too superior to carry out the lower functions. Gregory really has to choose between animism and vitalism, between a doctrine of the soul that makes it supreme throughout and another doctrine which virtually makes the life-processes independent. The dilemma arises naturally from talking in the language of rationalism and then trying to unite with it the naturalistic or biological phrases. Writers on psychology seem to have failed to see clearly the difference between Platonic and Aristotelian views. The divisions of the soul made by Plato served well enough as a basis for ethical teaching and owed their vitality to this fact. Aristotle was more specifically scientific in method, and his ideas found a natural development in the schools of medical and natural science. After the first century A.D. some embellishments were added to both, and the result was a three-cornered strife between Platonic, Aristotelian, and some allied view. Platonism found an ally in Christian doctrine so far forth as they both exalted soul over body. The view of Aristotle was brought into line by a quadripartite division, viz. rational soul, animal soul, nutritive soul, body. This is clearly an attempt to expand the dualism of soul and body into a Gnostic scale of powers: it is, in

fact, never used, but is the link between Aristotle's three "souls" and the trinity of parts (mind, soul, body) into which man could be divided. The confusions implied in this last form of doctrine are beyond numeration: it is enough to note that having taken man rather than the soul as the subject of discussion, the question to decide is what parts can be admitted. Gregory, on the high road to a theory of three souls, turns abruptly in another direction. The nutritive soul he converts into a vital power (δύναμις ζωτική) as the medical writers had already done. As a power and not a substance, this is potentially present apart from the rational soul. So, too, sensation is potentially present and actualised by the soul. Soul is therefore a substance—living, rational, and capable of endowing the organic sensitive body with vital power and apprehension of sensible objects. Gregory seems therefore to adopt the view that the soul is one without parts; where it is necessary to make distinctions he uses the tripartite division of nutritive, sensitive, and rational which he believes coincides with the body, soul, and spirit of St. Paul's terminology. But in reality this unity is not maintained; Nature takes its place beside reason as an independent agent. Gregory learned his physiology from Galen, and has decided views on the human organism. Life is like a stream, ever changing and yet always the same; three vital powers sustain life—the heat that nourishes, the moisture that keeps the right mixture and temperament, the binding force that holds together the frame and produces motion. Within the body lungs, stomach, and heart carry on their functions—respiration, nutrition, and production of vital heat. All this clearly falls outside the range of the rational soul, and Gregory admits as much. The effects of natural processes on the rational life he could understand; the mind cannot do without its organs and requires that these should be

healthy; but there is nothing to show that life may not be independent of the rational powers.

The union of vital and mental activities produces particular effects in two cases. In sleep the nutritive functions alone continue, but as the mind is not entirely set free some effects are produced in it which are as it were imitations of mental actions. The vital activities are also the source of impulses imparted to the rational soul which emerge as desires and passions. Here Gregory openly speaks of the irrational nature (ἄλογος φύσις), and adopts the language of the Platonising Stoics. The activities of the soul now definitely include desire and spirit and we have the Platonic threefold classification.

§ 4. We pass now to the question of conduct which involves first a statement of the relation between reason and desires. Reason does not produce the passions but incurs them as a result of its relation to the body. The Stoic position is thus abandoned for a dualism in which the rational part contends against the irrational. But is not the rational soul corrupted by these affections? Can these disturbances reach it and yet not ruin it? To this vital question Gregory makes a typical reply: these disturbances are affections of the nature of soul but do not reach its substance or essence. Conversely, the rational soul can assert itself against all attacks: it is by nature and divine ordinance the ruler: it is the image or copy of the divine, and the body, ruled by it, becomes also divine in the third degree, imago imaginis dei. The means to this end is the will; mind is not ruled by flesh, the reason is not the slave of the passions; on the contrary, mind is supreme in its own domain to accept or reject any external solicitation. Here the Stoic "assent" is again found useful; the mind receives objects of thought through the senses, but must exert itself to think

them; and as the object does not control thought, so the opportunity does not control action. The mind in both cases contributes its own activity. On this basis it is possible to reject all fatalism and make sin a voluntary choice of evil. Gregory definitely makes the mere affections neutral; ethical value attaches only to the use man makes of them: they are the matter to which the will gives a definite form. It follows that they are not to be rooted out but transformed; fear becomes obedience, anger becomes courage, base desires become purified love of good. The possibility of vice is the condition of becoming virtuous, so the passions are given to man for a purpose, and he must beware lest he pull up along with the tares the good wheat.

The final explanation of this theory of the passions is to be found in Gregory's doctrine of sin. God did not create evil or death and man must, in the original state, have been free from these. The body was then an image of the divine; through sin death entered into the world along with its consequences, distinction of sex and all the passions pertaining to it. As the beginning of this mortal existence was the putting on of an irrational nature as a garment of flesh, so the end is that putting off the garment which is restoration to the original state of perfection. The theology which follows from this has no immediate connexion with psychology. Gregory maintains the views of eternal life and eternal death which have already become familiar in Origen.

§ 5. Among the treatises on psychology stands the work of Nemesius (*περὶ φύσεως ἀνθρώπου*) on the nature of man. The author never deserts the doctrines of the Church and never doubts the ultimate truth of revelation: he believes at the same time in the unity of all truth and ranges freely through the heathen philo-

sophies for his information. He retains the general tendency towards Platonism and Neo-Platonism, but inclines to give more attention to Aristotle than was customary among Christian writers; he has more appreciation than might be expected for empirical research and shows an acquaintance with scientific developments; he is, in brief, an excellent type of the unoriginal compilers who produced at this time useful treatises for "advanced thinkers." The eclectic character of the productions does not justify any disparagement of the work; the selection of truths brought about by this method really served as a new doctrine, and exhibits that degree of originality which belongs to those who select their truths from a point of view already assumed as incontrovertible.

The first dogma that Nemesius sets out to establish is the incorporeal nature of the soul. The polemic by which this is sustained involves a discussion of the known theories of the soul, and throws an interesting sidelight on the main views considered to be important at the time. First comes Aristotle. The main objection to Aristotle is that he made the soul insubstantial, whereas, though immaterial, it is a substance. This opinion about Aristotle rests on a complete misunderstanding: it illustrates a view which was probably held by many, namely, that Aristotle's doctrine of form was incompatible with the self-subsistence of the soul required for the idea of resurrection. The Church found Platonism more fit for the mould of Christianity, largely because its teaching made the soul more distinctly an independent reality; Aristotle was regarded with suspicions that are intelligible if such misunderstandings as this of Nemesius were common. The second main argument against Aristotle is that the phrase "potentially possessed of life" cannot be applied to the body; life is always actual, and there is no intermediate stage between lifeless and living such as

this term implies. The truth according to Nemesius is that the soul alone has life and the body shares in that life. This objection would be valid if Aristotle had meant any such state of body: it fails just because Nemesius interprets as a real intermediate state what Aristotle meant to be a logical determination. Nemesius is thinking of life as that which is or is not possessed; Aristotle was thinking of a development which, treated analytically, must imply antecedent conditions in soul relative to subsequent fulfilment. It was not given to all to grasp the more abstract movement of Aristotle's thoughts.

The doctrine that the soul is a harmony is rejected, after the manner of Plato. The view of Dicæarchus on this point is paralleled in Galen by the medical view that the soul is the fact of mixture; this is rejected as no better than the doctrine of harmony. A refutation of "the Pythagoreans" and of the definition of the soul as a self-moving number given by Xenocrates completes the defence of the soul as an independent substance. The next point to establish is the immaterial nature of the soul. Here the Stoics, Critias, Hippo, Democritus, and Heraclitus are selected for refutation. One argument applies to all: material substance is divisible and requires a bond of unity; the fact of unity in a corporeal substance implies the presence of the incorporeal. Nemesius declines to accept the (Stoic) solution and grant the matter an inherent power of cohesion; he takes from Plato the argument that self-movement belongs to the soul alone. The Stoics raise two points of special interest: first, that similarity (inherited characteristics) is only possible in material things; secondly, that only matter can act on matter, and soul, since it acts on body, must be matter. Against the first Nemesius argues that two spatial figures are alike, though space is admitted by Stoics to be immaterial. Against the second he pits the assertion that

the presupposition is wrong: it is just as easy to say that soul acts on body and therefore the immaterial acts on the material; the phenomena of the passions seem to support this view. The final conclusion is that the soul is an incorporeal, self-subsisting substance containing its own principle of motion. From this definition immortality is naturally deduced; but Nemesius does not attempt a proof: the Scriptures are sufficient. On the subject of the origin of the soul Nemesius is indefinite and inclined to a modified Platonism; as the natural has a beginning in time so the supernatural has no beginning in time; the Platonic doctrine of Reminiscence involves the existence of the soul prior to this life; if these two are combined the result is a theory mainly interesting for its divergence from all others. Generationism, Creationism, and Traducianism are all rejected; while Platonism does not contain the idea of a soul that has no beginning.

The union of the soul with the body is explained as a process of unification (ἕνωσις), which involves no change in the nature of the soul. The reasons for this view are as follows. On the one hand the fact that the whole shares in the affections of every part (συμπάθεια) proves the real unity of the soul with the body: it is the justification for the view of man as one creature formed by body and soul. On the other hand, the supersensuous cannot undergo change or modification: it cannot be mixed with the sensuous, as, e.g., wine is with water. The idea of juxtaposition (Stoic) or of chemical transformation (as food is converted into blood) is impossible in the case of an unchanging immaterial reality; neither is body related to soul as its vehicle (Plato). All these Nemesius rejects in favour of the mystic doctrine of Neo-Platonism; soul suffuses matter as light does the air: it is manifested in the spatially extended body without having any dimensions itself; it is in us as we say God is in us; no

spatial limits can be assigned to it, and we can only say of it that it is where it acts. This is the union possible to two natures as distinct from the union of two substances, and the doctrine has a peculiar value for Nemesius because it leads into the theological question of the union of diverse natures in the man Christ.

Nemesius adopts the division of the soul into rationa and irrational parts. The irrational is subdivided into that which obeys reason and that which is not obedient to reason. In view of ethical problems it is convenient thus to divide the irrational soul according as it is controlled or not controlled by previous intentions. Under this lowest head come the natural processes of life, the nutritive and the vital activities ; under the other division of the irrational soul come desire (*τὸ ἐπιθυμητικόν*) and spirit (*τὸ θυμικόν*). The rational soul comprises the powers of imagination, memory, and thought. The eclectic character of this work is obvious. Nemesius seems to have lacked any definite guiding line and is consequently confused in his treatment. The analysis of psychic functions quoted above has been made according to the principles of the Platonic and Aristotelian doctrines : it assumes that rational and voluntary are psychologically one and the same, that the will is ultimately desire that accords with reason. But it is possible also to start with a distinction of voluntary and involuntary and divide the functions of the soul according as they are or are not activities of the will. This Nemes us also attempts to do, and from this point of view divides human activities into physical and psychic : the physical includes the animal functions (nutrition, growth, circulation of blood), while the psychic includes the whole range of activities dependent on attentive consciousness from sensation up to reason. The development since Aristotle had laid increasing stress on conscious effort.

Nemesius desires to unite the Will and the Reason in the unity of conscious effort, with the result that his later classification of human activities practically becomes a division between subconscious reflex actions and conscious purposive actions. The change is significant: it is from Galen and the medical schools that Nemesius derives his idea of man as a physiological organism, and his "psychology" consequently becomes burdened with matter that belonged to a primitive conception of soul as vital principle, but has now become too distinctly differentiated to be really part and parcel of psychology. The result merits only a brief statement. The foundation of the rational life is the activity of the senses; on the various senses Nemesius gives only a collection of views derived from Aristotle or Galen; the analytic work comes from Aristotle, while the physiological detail is taken from Galen. A sensation is not merely a change in the organism: it is consciousness of such a change; the soul grasps the external object by means of the sense-organs and the process is not a passive yielding to impression but an active apprehension. The imagination, described after the Stoic manner, is the link between sense and thought. Nemesius is not clear on the relation between the product of sensation, the mere perception, and the consequent mental image or idea. In spite of the Stoic terms the real influence seems to be Neo-Platonic, for the image is clearly a determination of the soul in relation to an object or even, as in morbid cases, in relation to states of the body. From imagination comes memory, and the whole elaboration of ideas which makes up the life of discursive reason. This mediated thinking is distinguished from immediate thought. The idea of reminiscence taken from Plato is here combined with the Stoic doctrine of instincts. The life of the soul previous to its earthly existence revives in us through learning on the

one hand, and on the other hand without learning as a purely instinctive tendency. To this latter source Nemesius assigns our ideas of God and Providence; the Stoic "instinct" thus moves toward "innate ideas": the "God in us" of Cicero becomes tinged with Christianity, and as the Pantheism of the Stoic is rejected, the movement of the Universal Reason becomes a rational supersensuous knowledge of a God that is separate and personal. The use of the term Logos and the distinction of the immanent (ἐνδιάθετος) and outgoing (προφορικός) Logos is significant; for it was through this Logos that Hebrew and Christian explained the relation of God to the Gentiles; the Word was in them as soul of their soul and reason of their reason.

The discussion of the Will in Nemesius is disappointing. Throughout Aristotle is closely followed in sense and often in language; the familiar language of the Nicomachean Ethics is reproduced, and nothing results but a compendium of Aristotelian teaching.

CHAPTER X

THE DOCTRINE OF ST. AUGUSTINE

§ 1. The work of St. Augustine is dominated by aims which partly assist and partly retard his inquiries. As a philosopher he seeks for truth, for knowledge that is without presuppositions and wholly certain, and this he finds only in inner experience. In the writings of Augustine we find a second influence, the theological bent, which employs revelation as the guarantee of truth. Knowledge is therefore divisible into two main classes according as it is derived from revelation or from introspection. In the sphere of metaphysics the nature of inner experience is made the starting-point for the construction of a metaphysic of knowledge, and this is Augustine's main interest. Subservient to this is the life of the self, the nature, origin, and faculties of the soul; which also attract the attention of Augustine for reasons both philosophical and theological. For the study of psychic life the power of accurate introspective observation is supremely valuable; throughout the work of Augustine we find this power exhibited in a remarkable degree.

Such inquiries as are associated with a taste for natural science do not fall within the scope of Augustine's genius: when he goes beyond the data of introspection he contents himself with the dogma of revelation; but within the circle of what may be called spiritual phenomena he moves with the assurance of a master. The supremacy of Augustine in the Church is easily understood: he combined with an exhaustive knowledge of theological

doctrines an intellectual power capable of interpreting those doctrines luminously, and infusing into them a new life drawn from his own innermost being. The age was ripe for the originality which could contribute a deeper insight into the reality of the spiritual life, and this was the essence of Augustine's contribution to the progress of knowledge. The true keynote of his work is the dictum "go not forth: withdraw into your own self: in the inward parts of man dwelleth truth."

§ 2. The world is, according to St. Augustine, created and sustained by God, who is the author of good. Man as a part of this world is a created being and our knowledge of his nature is based upon the account of his creation given in the Book of Genesis. All that Augustine has to say about the physical part of man is based on the revealed doctrine. As against the Manichæan doctrine that matter is created by the devil, Augustine maintains that it is created by God. There is therefore no primary opposition of body and spirit from the cosmological point of view (such as Lactantius taught), and the dualism of mind and matter is not the same as the dualism of good and evil. The distinguishing mark of body is occupancy of space and the possibility of movement from place to place: a definition of matter or body which makes it, in the first instance, a particular kind of object. The mind does not know the nature of body, so the reality of matter can only be asserted on the ground of revelation; in other words, as matter is by definition an external objective reality it cannot be itself an experience, and therefore cannot be known in the full sense of knowing.

The world arises out of chaos by the creative act of God; man, as an organised creature, arises similarly by an act of creation out of pre-existing matter; the flesh was created out of damp earth. The history of creation

is therefore continuous from the beginning up to the existence of the body. The question then arises, can we supply a natural history of the soul, that is, can we indicate a pre-existing material out of which it was formed ? To this a negative answer is given ; matter must always be that which has length, breadth, height, and spatial position ; it must therefore be always distinct from soul, whether we speak of the four elements or that nameless fifth substance by which some have attempted to bridge the gulf between matter and mind.

The soul was created by God at the time when the body was created. Its creation and its birth are distinct events ; as nothing was created after the six days of creation the soul must have been created then. The breath of God by which Adam became animated, or endowed with anima, was the act by which the soul was transmitted into the body. Augustine is careful to make his statements on these subjects very reserved ; he is, however, sure upon certain points, which he sums up as follows : The soul is from God but not one with the substance of God : it is not corporeal ; it was made by God, not in the sense that something of a different nature was made into soul (as earth was made into the physical man), but rather from nothing : it has a life which it cannot lose, and, though mortal in the sense of being capable of change from better to worse, is indestructible, and so immortal.

Upon the subject of physiology Augustine has little to say, and that little is of no great value. The body he regards as wholly dependent on soul so far as its life is concerned ; its vegetative functions are not possible without soul, and the body itself has importance only as the medium of sensation and as that which the soul must rule. There is no intermediary substance between body and soul ; but the elements which are most subtle, light and air, are most akin to soul, and are therefore

those through which the soul acts in administering the body.

The will exercises rule over the body; the nerves are filled with air which obeys the will, transmitting to the limbs the motions commanded by will. The elements of body recognised by the "medici" include air which is contained in the lungs and diffused through the veins, and also fire. The fire is of two kinds: that which is hot, located in the liver, and that which is akin to light (luculentam qualitatem) which ascends up to the brain "as it were the heaven of our body." From the brain run channels (fistulæ) to all the sense-organs, and from the neck and spine branch out countless minor channels over the whole body, thus making possible the sensations of touch common to all parts of the body. The mind sometimes turns in upon itself for the contemplation of truths that are known only by reason (reflection); at other times it receives messages from the nerves or institutes motion in the members. This motion is spontaneous, not due to external causes, but arising from the soul itself; it is peculiar to sentient creatures and spontaneity means the power of producing motion after the occurrence of sensation. Such movements as are involved in growth are not spontaneous: they do not imply a previous sensation on which they depend. The spontaneous movements depend on sense, not because sense produces them (for in that case all action would be reflex and automatic), but because sense is the awareness which conditions the activity of soul. Soul acts upon the body from its seat, the brain, which has three ventricles; the anterior is the nerve-centre, the posterior is the motor centre, and the middle ventricle is the seat of learning. The memory centre is required so that motions may be connected one with another, the past with the present. Such is the machinery of sensation and motion. Throughout

Augustine is careful to assert that the physical and the psychic are distinct; the memory centre, e.g., is not itself memory. For their psychic functions all parts are dependent on the soul: it exerts an original activity (intentio animi) which produces motion and conditions all receptivity. If the soul is not intent the effects of external agents are unnoticed (latent). This is the first point at which we see how Augustine makes the Will the most important element in life. The simplest act of apprehension involves some degree of Will, for in it are compounded three elements; the mind is conscious of itself (memoria), aware of many possible objects of attention (intelligentia), and selects one with which it identifies itself (voluntas). The world for St. Augustine is the place of countless voices, voices of nature calling to the soul; but only those are distinctly heard toward which the soul exerts itself in the will to attend, and more than all these is the voice of God whose eternal presence is an eternal appeal to the human will.

§ 3. The nature of the soul is, as we have seen, determined by St. Augustine on the basis of revelation. Its functions are all the manifestations of life, soul being a substance which partakes of reason and is suited to the task of ruling the body. This implies an action of soul on body which Augustine does not profess to explain: he shrinks from admitting the action of body on soul, and is careful at all points to make the affections of the soul follow or accompany rather than result from the corporeal affections; all emphasis is laid on the activity of soul; it produces all actions, and its actions always have some effect on the body. Sensation takes place through the five senses, and requires first an organic impression, upon which follows an affection of the soul. Sensation is therefore preceded by a physical change

which is its condition though not its cause. When he gives a definition of sensation Augustine approaches it from the inner side, from the aspect of it as result. It is a form of awareness that is produced through the body. The significance of the phrase " through the body " is explained thus : if we define sensation as merely awareness, it would include our awareness of such a physical process as growth, which we do not, in fact, *feel ;* we know that our hair, e.g., grows, but we do not know this by feeling. It follows that we can be aware of events in two ways : by sensation and by reason ; and the distinguishing characteristic of sensation is the actual feeling. This distinction we can discover by introspection, but the significance of the fact in so far as concerns the relation of mind to body is a mystery. In addition to the five senses we have the sixth sense, the traditional " common sense," by which we know that we have two or more sensations at a time. From the definition of sensation as awareness there follows the corollary that perception is always and only of our own modifications : the soul knows itself and its changes, and is limited to this knowledge.

§ 4. The soul is regarded by St. Augustine as simple ; and, following the Neo-Platonists, he says the soul is at the same time wholly present, not only in the entire mass of the body but also in every particle of it. The relation between soul and body as thus conceived is hardly explicable. It seems to be contradicted by the fact that some animals can be cut in two and yet continue to live in both parts, a fact which furnished a standing problem for philosophers. The only approach to an explanation is through analogy ; the word is to the idea as body is to soul ; and as the division of the word does not destroy the idea it expresses, so division of the body does not affect soul.

The "simplicity" of the soul excludes the possibility of its containing different natures or essences; but not the co-existence of diverse "parts," which are really diverse functions. These are sometimes classified in the Aristotelian manner as nutritive, sensitive, and intellectual; but the division favoured by Augustine is that of Knowledge and Will or Love. Knowledge includes sensation, thought, memory, and imagination. The Will or Love is either of the world or of God.

We have seen in the case of sensation the emphasis laid by St. Augustine on the inner activity. To the soul itself he allows no knowledge, but asserts that the inner or central sense alone has knowledge. Memory he regards as a purely spiritual activity: the body may hinder it but can never help. From the assertion that the object of consciousness is always our own states, it follows that memory is always of ourselves and not of things. Memory may be either sensuous or intellectual. By the former we remember affections of the senses, and Augustine notes that this is the case for all the senses, i.e. we have a tactual memory, a visual memory, and so on. The memory is always spiritual; it is not a receptacle, and man cannot "keep" an idea without thinking it or feeling it. It is not necessary that one should be always conscious of that which he knows; man, therefore, has knowledge as it were potentially, and memory is the act of restoring knowledge to consciousness. Augustine recognises the conditions of a good memory and enumerates at different times what might be called Laws of Memory, viz. strength of the impressions, repetition, order, revision, and, above all, the exercise of the mind's activity in the first instance, the application of Will or attention. Memory is naturally connected with reminiscence or the art of reviving one idea by means of another. On this subject Augustine follows

Plotinus. He totally disregards the physiological aspect of the process but recognises the principles of association, agreement of one experience with another in respect to place, time, and manner, and resemblance of one object to another.

Thus far we have spoken of memory and reminiscence within the limits of sense-experience; if we turn now to the intellectual memory we shall find that for Augustine the true explanation of these mysteries lies in a metaphysical interpretation of life. Augustine accepts the position maintained by Plato in the doctrine of reminiscence (ἀνάμνησις), but with one important change, due perhaps to Neo-Platonic influences. This change is primarily the rejection of the idea that the soul forgets what it once knew. Plato's theory of reminiscence was also a theory of forgetting. Augustine refuses to accept the latter part, for he believes that all knowledge is really eternal, the living truth, in fact God; and our knowing is self-consciousness, the coming to consciousness of that eternal thought which is ours through the unity of our nature and God's being. This point of view dominates St. Augustine's writings and is expressed in many phrases of great depth and beauty. The soul, he says, always knows itself as thinking the absolute but is not always conscious of knowing; the soul's knowledge of itself is as it were a remembering of itself; the soul lives and moves in God and it is he, not its own former knowledge, that the soul recollects; the knowledge of God gives us when we attain it the feeling of ending our forgetfulness. Reminiscence is always the return into consciousness of that which has lapsed from consciousness; the Self is the exhaustless mine from which the jewels of thought are raised into the light: all that we find is found in our own minds. To learn, then, is to recollect and as all knowledge is innate, all learning is merely making explicit the innate.

This we can only do for ourselves ; it can only be effected by self-activity and only God can start it ; human help is only the occasion, and the teacher cannot teach us but only enable us to learn. As we begin from God so all learning ends with God ; growth of knowledge is the growing knowledge of God, and intellect ends with the comprehension of a verity which is God.

In this exposition we recognise Platonism penetrated by Christian mysticism. For Augustine the activity of the mind presents a mystery to be contemplated and studied but not to be solved. He realises (after Plato) that the turning around of the soul is the essence of education ; but he thinks it is not enough to face the light : the eye can see what it does not know, but the mind does not so much as see that which it is not fitted to see. If this is true of the mind, it is still more true of the spiritual eye. In the physical world seeing is believing ; in the intellectual sphere belief is the condition of seeing. The soul cannot see before it is cured of its diseases, and therefore knowledge is impossible before the soul is in a fit condition. For knowledge is not like gold or silver : these we may know without having ; knowledge we must have as part of our very being. The beginning of true knowledge then is not learning, but the will to learn, the disposition to exert the inner force, and so attain the true form of intellect, " information " of the soul. This disposition is really given by the grace of God : it is a mystery ; but Augustine indicates a way of attaining knowledge, namely, submission to authority by which he that would learn becomes fit to learn. This view of learning and of knowledge naturally terminates in an ideal of knowledge not unlike the Platonic.

§ 5. The imagination is for Augustine a faculty mediating between memory and understanding, not between sense

and memory. Augustine regards imagination as a faculty or activity of the soul which has for its material the memory-images, just as sensation has the external objects for its material. He speaks of the imagination as working on its material, and consequently directly opposes any theory that inclines to describe it as a passive receptacle of images. That activity of the soul on which Augustine lays so much stress is manifested in the combination of memory-images, and goes so far in this way that imagination seems to absorb the work usually ascribed to reason. Augustine prevents us from supposing that imagination and reason are the same thing by pointing out that the work of imagination is limited to sense-images. The activity of the mind is seen also in thought, where its objects are of such a kind that imagination fails to be able to picture them; this is reason, a faculty of concepts as opposed to the faculty of images. Some of the most remarkable and penetrating observations of Augustine owe their origin to his careful study of the sense of rhythm. From this he came to a clearer perception of the subjective elements in experience. He observed that we are limited in our sense of rhythm; after a certain length we fail to grasp a piece of music as a whole; so that the grouping and unification of a series of experiences seems to be the work of the mind, and to vary with the power of the mind. Different minds have different degrees of capacity; animals have a sense of space and time which varies according to their kind and their relation to the universe. Time and space therefore represent the individual's mode of being: they are relative to it; the relation of the creature's body to the whole universe and of its duration to all time determines its perception in respect of space and time. The perception of time and space ends with life, being relative to our mode of existence.

Augustine believed in the immortality of the soul.

Time, he said, is only the extensive measurement of experience, a distentio animi. The soul is not in time but time is rather the form in which the soul is presented to itself. There is consequently no difficulty in the idea of immortality, so far as time is concerned. The real problem is to find some reason for this continuous reality of the soul. Augustine finds it in the fact that reason is truth, and truth as such is not in a class of things to which change or corruption has any relevance. As we in fact say now, change is a category of the mind and not a category under which mind can be brought. In fact, all our ideas of things are forms of reason, and when true are eternal. The soul which has (or is) eternal truth must itself be eternal.

The distinctions made by St. Augustine are easy to understand if his general principles are understood. The mind strives always to see truth. In sensation it sees truth through the body, which is the only way of apprehending some truths. Reason is either a process or a state according as the term is used to mean reasoning or the result of reasoning. In other words, we may speak both of looking and of seeing in reference to the mind. The soul, when it reasons, looks for truth and when it has reason it sees truth, has the vision of truth. Knowledge is always of an object and seems to keep the object away from the observer; in perception there is an outer object, and science is no more than a system of such perceptions. But the perceptions themselves are not outside us: they are really ourself in action, and they illuminate themselves till the inner light increases and breaks up the darkness of ignorance. At that point men become conscious that the relation to outer objects is unsatisfactory. What a man knows truly he makes a part of himself: he grows with growing knowledge, not quantitatively but intensively, and so advances from scientific to philosophic

knowledge, absorbing all "facts" into one intuition of himself. After science with its delusion of externality, comes wisdom; here knowledge reaches its highest development, but the nature of man is still not wholly formed; so long as the reason is a dry light it is partly abstract, but when the will identifies itself with the known, when Love is added to Wisdom, every element in man's nature is fused into a unity, the unity is complete and the development is finished.

Augustine takes a strong line against scepticism. Truth is for him one and eternal and innate to every man, it is in fact a germinal Logos, it bears witness to itself, it is found even in error. What is doubt but belief in disguise, or thought questioning itself? Does not doubt involve all the functions that men profess to doubt? And what is error? If a man thinks that things are what they are not, can he know his error without at once knowing it as error, and so annihilating the essence of error? Error is, indeed, the purely irrational, that which has no reason and evades all reason. It might be said that error is a degree of knowledge or implies imperfect knowledge. Augustine replies that knowledge has no degrees; a man either knows or does not know; doubt and hesitation are not degrees of knowledge, they are knowledge, and only appear to be a kind of ignorance because they imply a knowledge of limitation. To sum it all up: Augustine takes the terms self, knowledge, life as fundamentally one; we can only speak from experience and our negations are really affirmations about something: behind them all is consciousness, in which the self is one with itself and no man can get outside of that self or project himself out of the unitary experience, which is really the self viewed in extension. Psychology is based ultimately on metaphysics: its hypotheses are the axioms of life which are self-evident, unless they fail to be evident at all. It was just in this

working back to the axioms of being that Augustine showed his power of thought and came so near to anticipating the use which Descartes made of these same axioms.

Such in brief outline is the psychology scattered through the works of Augustine. His thought terminates in a vision of life as a progress from God to God. Here there emerges the mystic element of his teaching. The soul has seven grades of being. First, there is soul simply as life, unifying and sustaining the organism; then the soul as sentient, the agent in perception to which belong habit and memory; third comes the soul which creates and supports the life of reason as practical faculty; fourthly, the soul turns from the world, values itself as better than body and seeks God in nature; the fifth condition is one of passive purity, a serene contemplation of truth; this leads to the sixth state, a state of activity on a higher plane exhibited in a craving for satisfaction of the mind; seventh and last is the vision of truth which is not a stage (gradus) but the goal, the final place of abiding (mansio). This last state is, of course, that ecstasy which has been already found in Plotinus. Augustine does not regard it in any way as a fanatical or abnormal condition. The foundation of the doctrine has been already laid in the earlier facts. For Augustine the soul goes forth in those activities which involve the outer world. The highest grade of these activities is science, which is a reasoned knowledge of things temporal. Above this is wisdom, the intellectual knowledge of things eternal. From such a beginning it is logical to assert that the higher activities of reason are self-centred, in them the soul discovers itself and its own nature, reveals itself to itself and understands that its content is no other than itself expanded. So we might suppose a man to know himself vaguely, then to see an image of himself in a glass, and finally to know himself through that image which revealed him

to himself. The analogy has been used before Augustine's time and he could quote the words of the Apostle to support his belief that here we see as in a glass darkly. The state of true knowledge, the Gnosis of his predecessors, is for Augustine a state of ecstasy. He has described it and no words could be better than his own. "And when our discourse was brought to that point, that the very highest delight of the earthly senses, in the very purest material light, was, in respect of the sweetness of that life, not only not worthy of comparison, but not even of mention; we raising up ourselves with a more glowing affection toward the 'self-same' did by degrees pass through all things bodily, even the very heaven, whence sun and moon and stars shine upon the earth; yea, we were soaring higher yet, by inward musing, and discourse, and admiring of Thy works; and we came to our own minds and went beyond them, that we might arrive at that region of never-failing plenty, where Thou feedest Israel for ever with the food of truth" ("Conf.," bk. ix., section 24, Pusey's transl.). Here we have clearly a state of feeling, the awakening of thoughts that lie too deep for words, vivid realisation of limitless possibilities, and a condition charged with greater power than is found in the detached thinking of daily life. But there is in it nothing more than intensity verging on passionate self-abandonment to aspirations. These are conditions by no means uncommon in the history of genius; whether the vision is of gain or sacrifice, of empire or wealth, of earthly success or heavenly reward, life has its supreme moments of elevation for all who aspire. Whether we condemn them as illusions or explain them as pathological they remain undeniable psychological data. The interpretation put upon them is a different point. Augustine chooses to regard these exalted states as really highest and nearest the godlike. On the correctness of this nothing need be

said here, and it is enough to remark that Augustine regards inspiration as the inflowing or inbreathing of transcendent superhuman powers; the artist, for example, has for the origin of his ideas a beauty which is transcendent, he does not see it in things, but looks through things to it. So in music, harmony is not a sequence of sounds but something over and above the sounds, some deep significance or eternal meaning which has taken upon itself this mode of appearance. Ultimately, indeed, all comes back to one phrase, God is all; the unity of all life's phases is found in oneself, a spiritual unity without quantity or diversity; and the unity of all spirits is likewise the one Spirit, God.

Augustine excels in his work because of the intense feeling which inspired it. No other philosopher ever wrote of the great mystery of being so as to show the agony of his thought in the way that Augustine wrote in the "Confessions." There we have not only a theory but an autobiography of the soul, and the words come slowly as of one wrestling with his thoughts. The mind of Augustine seemed to take up all existent theories; flashes from Plotinus, Stoic writers, Clement and Origen light up this page or that; we seem to catch here and there a glimpse of familiar light shining from afar; but there is no denying that the brilliance of Augustine eclipses all those: he stands with the greatest, with Plato and Aristotle, and in one respect is superior to them. Psychology reaches a second great climax when its expositor can say that the foundation of the soul is continuous self-consciousness and thought is simply life reflected into itself.

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NOTES

[Where only the Author is quoted the full title of the work will be found in the bibliographical list. The abbreviation S.B.E. denotes Sacred Books of the East.]

PART I

CHAPTER I

§ 1. "The word history": v. Seeley, Introduction to Political Science. Lect. i.

§ 2. Cp. Spencer, Principles of Sociology.

(p. 8) v. Rohde, i. 46.

(p. 9) v. Rohde, i. 44.

Aristotle De Part. An. 10, 672 b 31, carefully explains this: the φρένες are so-called ὡς μετέχουσαί τι τοῦ φρονεῖν; but these parts do not really function in psychic changes, they only undergo a kind of sympathetic affection. (For the parallel idea in Hebrew psychology v. p. 232.)

(p. 10) v. Rohde, i. 43 *seqq*. Zeller, Pre-Socratic Philosophy (E.T.) i. 123.

(p. 11) v. Tylor, Primitive Culture.

Cp. Frobenius, ch. xii. *seqq*.

The views of Frobenius differ somewhat from those of Spencer and others, generally with deeper insight.

(p. 13) Typical passages in Homer are the following: Iliad, xxiii. 99–107. The ghost of Patroclus is visible and speaks: it is insubstantial to the grasp and like smoke: its voice is thin, i.e. bodiless: in Hades there is ψυχή and εἴδωλον; but not φρένες, i.e. real life.

Il. xvi. 856. The soul going to Hades leaves behind the manhood and bloom of the living person.

Il. xvi. 505. The soul comes out of the body when the spear is drawn from the wound, cp. xiv. 518. These passages point to the identity of soul and blood.

Odyssey, x. 490, xi. 34. Descriptions of the ghosts of men; also xi. 151, 215, 386, xxiv. 1–14, the simile of the ghosts and bats in a cave.

Od. xi. 489. The complaint of Achilles.

Cp. Zeller, Pre-Socratic Phil. E.T. i. 124; Rohde, i. 43.

life after death: Odyssey, xi. 488; v. Plato's excellent epitome Republic iii. 386 B.

(p. 14) Rohde, i. 73. Aristotle (Metaphysics 1000 a 15) found this unintelligible. The idea should be compared with the common Aryan belief that sacred food, e.g. the consecrated sacrifice, produces union of a human with a superhuman nature: v. this fully treated in Robertson-Smith, Religion of the Semites, Lect. x. The Platonic use of τροφή to denote the nourishment of the soul is another aspect of the same idea: the soul, as much as the body, "is what it feeds upon." The soul can be quickened into real life by a draught of blood according to the Odyssey: conversely the gods have ἶχωρ, not blood, in their immortal bodies.

CHAPTER II

§ 1. (p. 17) Projection of the idea of self was first adequately described by Lucretius, iii. 879.

§ 2. (p. 19) v. Burnet, Early Greek Philosophy, on Anaximenes. Further evidence in the sections on Empedocles, the Hippocratic writings, *infra*.

§ 3. (p. 20) See Gomperz, Griechische Denker, i. (Einleitung).

(p. 21) Thales: v. Siebeck, i. 35 (note).

(p. 22) v. Burnet (Ed. ii. p. 79). "The primary substance bears the same relation to the life of the world as to that of man." This "marks the first beginnings of an interest in physiological matters." It is necessary not to forget the extent to which Anaximenes was helped by language. Physiological views received a sort of sanction from the use of terms that applied both to breathing and to wind, particularly ἀΰω and πνέειν.

Cp. Max Müller, Lectures on Science of Language, p. 382 (1862). "This anima meant originally blowing or breathing like spirit from spirare, and was derived from a root 'an' to blow, which gives us 'anila,' wind, in Sanskrit, and 'anemos' in Greek. Ghost, the German Geist, is based on the same conception." Cp. Plato, Cratylus, 400b, ψυχή derived from φυσεχη, ἢ φύσιν ὀχεῖ καὶ ἔχει. The connexion is one of thought rather than language.

§ 4. (p. 22) Orphic tradition: v. Adam, Religious Teachers of Greece, Lect. v. and p. 192. Burnet, op. cit.; Gomperz, i. 99 ff.

(p. 23) It is doubtful whether the doctrine of harmony was taught in the Pythagorean school. Aristotle (De Anima, 404 a 17) vaguely refers to them as identifying the soul with the motes in the air or as that which moves the motes. But Aristotle neglects the Pythagoreans, and in the Politics (5.1340 b 18) implies that the doctrine of harmony was

widely received. The evidence of Claudius Mamertus is most definite, but hardly of the first rank. The doctrine of Aristoxenus is probably different, but Pythagorean in origin and spirit: v. Zeller, Aristotle, ii. 436; Pre-Socratic Phil., i. 476 *seqq.* Plato, Phædo 86, does not necessarily prove the doctrine Pythagorean (Archer-Hind, note *ad loc.*). There seems sufficient indication that the Pythagoreans applied the idea of number to the soul, probably without reference to the transmigration theory which would be implicitly contradicted. Whether it was the nature of the soul or the mode of union with the body that was originally discussed, cannot now be known. See for specimen of Pythagorean ideas Philolaus, in Diels, p. 253, especially the suggestive phrase translated, "So aber bringt sie [die zahl] alle Dinge mit der sinneswahrnehmung in Einklang innerhalb der Seele, usw." Further exposition in Siebeck, i. 66, Zeller, Pre-Socr. Philos. *supra*. "Harmony" must have meant the "fitting together" of parts of the soul or of soul with body, being a word more applicable to structures than musical compositions at this early date. The analogy of soul and music, therefore, belongs to a later use of ἁρμονία.

On Alcmæon, Gomperz Gr. D. i. 119 and notes. Material in Diels, p. 103. Gomperz is attacked by Schultz (Alt-Ionische Mystik) for not recognising the "mystic" side of Alcmæon sufficiently. Alcmæon's "science" must not be over-estimated. Siebeck, i. 90.

(p. 24) On this see Beare 13. "The 'visual ray' hypothesis, which makes seeing an 'act' of the eye, cannot be really harmonised with the other hypothesis by which the eye with its aqueous humour is regarded as a mere mirror reflecting objects as is done by a standing pool." These two views should be remembered throughout the early explanations of vision.

For Alcmæon's views on sensation v. Beare under "Alcmæon." For the data Diels, 103.

(p. 25) Analogy of soul and sun: Aristotle, De An., 405 a 29 (Diels, Vorsokr. 105 for other refs.). On the doctrine of the senses Beare *passim*. On explanation of sleep, v. Gomperz, i. 436, quoting from Jules Soury: the idea corresponds to the modern "cerebral anæmia"; surely an accidental coincidence rather than anticipation.

CHAPTER III

§ 1. (p. 27) v. Zeller, Pre-Socratic Phil. E.T. ii. 89. "As the later theory of the Heraclitean school expresses it, all sensation arises from the collision of two motions." This hardly deserves to be called a doctrine of Heraclitus. All that we can get

out of Heraclitus is an application of the law of opposites. The *locus classicus* is Sext. Emp. adv. math. vii. 126 (Diels, p. 64). Even this is probably an interpretation, especially in the mention of ἀλλοίωσις (130). The terms πόρων, θυρίδων are more clearly Heraclitean: also ἀναπνοήν. Hence I lay most stress on the idea of incoming material: the inner fire requires its specific fuel. Burnet (p. 170) suspects πόροι as denoting a confusion with Alcmæon. The *idea* may well belong to Heraclitus even if Alcmæon gave the *term* a special meaning. v. Siebeck, i. 43, 121.

That "sensation requires opposition" is the doctrine ascribed to H. by Theophrastus (De Sens. i.). Siebeck's rejection of this (i. 121) seems due to a confusion on his part between "Reason" as substance and the process of experience. The implicit idea of relativity was developed later, v. pp. 57, 90.

(p. 28) v. Diels, Fr., p. 117. The simile of the lightning is not found in the Fragments, but is a justifiable analogy due to Plutarch (v. Zeller, Pre-Socr. Phil. ii. 80).

(p. 29). On this aspect of H. see Gomperz. The aristocratic element in Heraclitus' character is obvious from the Fragments, the few or the rational are οἱ Ζηνός ἐγγύς, and this is a Homeric tradition rather than a psychological doctrine.

§ 2. (p. 30) Aristotle, Metaphysics, 986 b 8. For the "standstill," cp. Plato, Theæt., 181 A, οἱ τοῦ ὅλου στασιῶται opposed to τῶν τὰ ἀκίνητα κινούντων. For general matter Diels 112 ff; Siebeck, i. 123. The significance of στασιῶται is shown by the addition of ἀπὸ τῆς στάσεως in Sext. Emp. x. 46 (Diels, 113).

(p. 31) Different constitutions: v. Theophrastus, De Sens. 1 (Diels, 115) and Diels, p. 128.

(p. 32) For Melissus v. Diels, 151 (trans. in Burnet). Cp. Gomperz, i. 153. Gomperz misses the point, viz. that predicates are opposed and therefore there will be change unless we are prepared to deny differences of condition as well as change of position in space.

§ 3. (p. 32) Galen makes out that Empedocles founded the Italian school of medicine: this is significant (v. Burnet, 234), but probably E. was an authority on healing just as he was an "authority on most things" (cp. Burnet, 231): "He claimed to be a god . . . he was not a mere statesman; he had also a good deal of the 'medicine-man' about him."

(p. 33) v. Siebeck i. 145, where anticipations of this in Alcmæon and the Eleatic school are noted. The idea common to all, from Alcmæon to Galen, is that of κρᾶσις. For a detailed account of Empedocles' "chemistry of the body," v. Gomperz,

i. 233. Empedocles merely maintained that degrees of sensitiveness depended on mode of composition. This was at least the beginning of the λόγος τῆς μιξέως, which figures largely in Aristotle. See especially Diels, Fragmente, 96, 108 and *passim*. Cp. Zeller, ii. 168: "The more homogeneous is the mixture of elements the more acute are the senses, etc." (translated from Theophrastus).

blood: "The blood round the heart is the thought of men" (Diels, Frag. 105).

(p. 34) "For it is with earth we see Earth, and Water with water: by air we see bright Air, by fire destroying Fire," etc. (Diels, Frag. 109, Burnet's version).

(p. 35) For discussion of terminology and problems see Beare, pp. 15–23 on vision, pp. 95–101 on hearing. Note especially p. 15: "It is not easy to ascertain how far the rays of fire passed outwards: whether (*a*) merely through the water to the outer surface of the eye, or (*b*) all the way to the object." See below on Plato's doctrine, pp. 73, 113.

§ 4. (p. 37) Aristotle, Phys. A. 4, 187 a 26 (Diels, 317).

(p. 38) On this see F. Krohn, Der νοῦς bei Anaxagoras. The crucial point is whether Anaxagoras meant that the cosmos began from purposive thought. Plato, Phædo 98 b, clearly implies that the teaching of Anaxagoras lacked this teleological character. Krohn notes a distinction of σπέρματα from χρήματα (op. cit. 15), and makes this a distinction between things that have and things that have not Reason. If that is maintained the doctrine has affinities with the Aristotelian distinction of μετὰ λόγου and κατὰ λογον. Anaxagoras is certainly more of a realist than idealist.

The material for the doctrine of Anaxagoras is found in Theophrastus, De Sens., quoted Diels, Frag. p. 323. See also the section in Burnet and the relevant parts of Beare *passim*. For another view see Adam, Religious Teachers of Greece. His view does not seem to be in accord with the data or the spirit of Anaxagoras' work.

CHAPTER IV

§ 2. (p. 42) See Beare, 163, for this and other instances: material in Theophrastus, De Sens., 49–83 (Diels, Frag. 390).

retain the air: "One hears most acutely if the external membrane is dense." For particulars v. Beare, 100.

§ 3. (p. 43) v. Zeller, Pre-Socr. Phil. ii. 272.

(p. 44) "Like perceives like." See Beare, 206. Theophrastus (De Sens., § 49, Diels, 390) "strangely hesitates" (Beare, 205).

The reason here given may explain the hesitation. Democritus does not accept the canon in the same way as Empedocles because atoms take the place of elements, and also because the emphasis is on transference of motion, not of qualities. But the canon was elastic: it survived ultimately in the belief (still found) that the intellect and the intelligible are related as "like to like."

§ 4. (p. 45) On Diogenes v. Diels, 344 (Theophrastus, De Sens., 39–45 quoted); Siebeck, i. 82.

(p. 46) *νοῦς . . . νόησις*: der selbständige, substanziell gedachte *νοῦς* des Anaxagoras wird zu einer dem Körperlichen inhärirenden *νόησις* herabgesetzt: Siebeck, i. 83.

On doctrine of memory v. Beare, 258.

CHAPTER V

§ 1. (p. 47) Hippocratic writings noted *passim* in Siebeck. Material in Littré, who is here used for reference.

On the schools v. some interesting comments in M. Wellman, Die Fragmente der Sikelischen Aerzte Akron, Philistion und des Diokles von Karystos (1901).

(p. 48) For the treatise see Littré, vi. 352. The disease in question was any kind of seizure or fit or form of madness. Aretæus was probably the first to narrow the term down to epilepsy. It was the fashion at this time in Greece (as in Egypt) to treat symptoms as indicating powers, e.g. foaming at the mouth indicates that Ares is the cause. In contrast with such ideas "Hippocrates" is very advanced. It is interesting to note that maniacs were afterwards treated very rationally: Asclepiades advised that those who feared darkness should be kept in the light: Celsus makes no reference to demons as causes of disease.

§ 2. (p. 49) On this question of the new method see especially Plato, Phædrus, 270 c. (Rhetoric is like medicine . . . because medicine has to define the nature of the body and rhetoric of the soul. . . . The method which proceeds without analysis is like the groping of a blind man.) Plato states clearly the principles involved. First we must decide whether the "nature" under consideration is one or many: if it is manifold it must be analysed and dealt with as a plurality. Each element in the whole has a power of acting or being acted on. Hence we study this power of action and reaction in the case of each part and of all the parts in combination. Thus the *φύσις* was being analysed: science abhorred mysteries, and *φύσιν δεικνύναι* in the best sense is *φύσιν διελέσθαι*.

(p. 50) Littré, vi. 473, *ξυνίσταται μὲν οὖν τά ζῶα τὰ τε ἄλλα πάντα καὶ ὁ ἄνθρωπος ἀπὸ δυοῖν, διαφόροιν μὲν τὴν δύναμιν, συμφόροιν δὲ τὴν χρῆσιν* (*περὶ διαίτης* § 3).

The use of *συμφόροιν* recalls the maxim of Heraclitus *τὸ ἀντιξοῦν συμφέρει*, i.e. when forces diverge they contribute to a single result (e.g. the buttress against the wall).

Fire: Littré, vi. 484, *πάντα διεκοσμήσατο κατὰ τρόπον αὐτὸ ἑωυτῷ τὰ ἐν τῷ σώματι τὸ πῦρ, ἀπομίμησιν τοῦ ὅλου κτλ.* This imitation is taken a little too seriously: the belly as a "reservoir" is the analogue of the sea: with other similar fancies.

(p. 52) v. Littré, vi. 525. This point deserves more attention than it has received. It is easy to see that the voice may be (1) expression of temper, (2) a sound whose quality depends on the larynx. The writer of this treatise seems to think there are secondary qualities in man. His primary qualities depend on the combination of elements: his secondary qualities, on the channels which the anima has to traverse. A physical basis for benevolence is hard to find; but an artist knows that the benevolent type is only to be drawn in certain ways, usually well nourished and proportionately developed. The same kind of crude generalisation underlies this passage.

§ 3. (p. 52) Cp. Littré, vi. 39, *περὶ φύσιος* § 4. *ἀλγέει δὲ ὁκόταν τι κτλ.* Pain is here said to arise when any of the humours is in excess or defect or not duly mixed with others but concentrated in one part.

air: v. Littré, vi. 92 *seqq.* The essay on "Airs," i.e. the *πνεύματα* outside of man called *ἀήρ* and the *πνεύματα* inside called *φῦσαι*, is most probably a rhetorical essay (Littré, 88), but none the less contains valuable information about current views.

(p. 53) v. Littré, vi. 147.

insanity: Littré, vi. 389.

CHAPTER VI

§ 1. (p. 57) v. Siebeck, i. 158. Plato, Theætetus, 153 ff.

(p. 58). In spite of Siebeck (n. 24, p. 274) this seems the right view. Siebeck would say that in Protagoras there is nothing but motion; and also that there are no definite objective qualities (i. 157). This seems due to a wrong view of the aim of Protagoras. His "qualities" are quite definite and objective; but they are not permanent, they do not persist changelessly. So with his movement: it is not so much "ohne substrat gedachten" as "the way in which the substratum is thought." The Sophists will never be understood until it is clearly seen

that they went out and up, from man to the heavens: the physicists did the opposite. There is nothing new in all this but method.

perception: v. Zeller, Pre-Socratic Phil., ii. 448.

knowable: v. Zeller, loc. cit. The controversy on this question has been due very largely to irrelevant questions. The only point that concerns Protagoras is the individual starting-point of knowledge: it must begin from an impression (αἴσθησις). He probably had no difficulty in finding people who "knew" a great deal for which they could show no basis in experience. He was more interested in reforming such people than in constructing a philosophy. Hence Plato is misleading. The central point of the position is indicated by Sextus Empiricus, Pyrrh. H., i. 219 (Diels, 515), πάντα γὰρ τὰ φαινόμενα τοῖς ἀνθρώποις καὶ ἔστιν, τὰ δὲ μηδενὶ τῶν ἀνθρώπων φαινόμενα οὐ δὲ ἔστιν.

§ 3. (p. 60) Socrates seems to be nearer the Sophists than some, e.g. Zeller, allow. The link between them is the desire to get away from the physicist and his "cosmos" (Xen. Mem., i. 1) and a belief in human limitations. The Socratic dialectic had no transcendental significance: it ends in personal conviction, and is not above the level of the Sophistic programme.

(p. 61) Xen. Mem., iv. 6. 6, εἰδότας δὲ ἃ δεῖ ποιεῖν κτλ. This shows the narrow rationalism of the view.

(p. 62) See Xen. Mem., iv. 3. 14, ψυχή . . . τοῦ θείου μετέχει. Zeller estimates the δαιμόνιον as a residuum. Xen. Mem. i. 1 clearly points to this: there is in experience a residuum which art does not comprise; this we leave to a higher power. The legend that Socrates was accused of atheism because he substituted his δαιμόνιον for God shows that he regarded it as θεῖόν τι: it would be consistent with Sophistic teaching to reduce all "theology" to the limits of personal experience. For the case of Campanella and the "voice" he heard v. Adam, 323.

§ 4. (p. 63) Cicero, Academics, ii. 46. 13, of the Cyrenaics, who, in opposition to Protagoras, "præter permotiones intimas nihil esse putant judicii" (Zeller, Socrates, 297). From Sextus Empiricus, Adv. Math., 192, we learn that the Cyrenaics argued for relativity of pleasures from the example of sensations under morbid conditions, e.g. the yellowness of sight in jaundice. The term "Cyrenaics" covers doctrines probably due to the younger Aristippus.

CHAPTER VII

§ 2. (p. 67) See Tim. 69 ff. Into this narrative Plato has woven his knowledge of contemporary science: it is a combination Anaxagoras and medical manuals. In detail the Timæus

presents facts: it can only be regarded as "myth" in so far as the construction put upon the facts is dictated by the artistic purpose of the author. The greater poets never neglect minute observations: in Plato, as in Dante, or Tennyson, or Browning, fact is the material of fancy.

marrow: Tim. 73 B.

inspiration: Tim. 78 E, *ἀναπνοὴν καὶ ἐκπνοήν*. This passage shows clearly the wide manner in which digestion, nutrition, and breathing were treated by Greek thinkers.

(p. 68) Plato never calls this a "nutritive soul": for him it is always, as soul, merely the creature of desires (*τὸ ἐπιθυμητικόν*). Tim. 70 E. describes it as directly concerned with *τροφή*. In 77 B it "has nothing to do with opinion and reasoning and thought, but only with sensation, with appetites accompanying." It is worth while to notice that Plato keeps strictly to the idea of soul. Aristotle diverged into that of function. Plato uses the terms *ἐπιθυμητικόν, θυμοειδές, βουλευτικόν* for his "parts" of the soul. Aristotle's use of *τὸ θρεπτικόν* as name for the nutritive functions really marks another point of view.

(p. 69) See for the Reason, Tim. 90: for Courage, Tim. 70 A. (70 C *τῇ δὲ δὴ πηδήσει τῆς καρδίας*): for the "lowest" functions Tim. 70 E. This is the part which is a beast "dwelling as far as possible from the seat of counsel."

(p. 70) v. Tim. 71. The use of terms implying harmonious unity is noticeable here: e.g. *μέρει συγγενεῖ; μήτε προσάπτεσθαι τῆς ἐναντίας φύσεως* (i.e. has no dealings with the unlike) and others.

§ 3. (p. 72) Tim. 43–4.

§ 4. (p. 73) Tim. 64. Cp. 77 E., "distributing throughout the whole body the sensation due to the perception" (Archer-Hind). But *τὸ τῶν αἰσθήσεων πάθος* is rather "the affection which constitutes the feeling-element in sensations." It is necessary to remember that there is a feeling-element and a motion-element in every sensation: *αἴσθησις* is primarily *εἴσθεσις*.

v. Tim. 44 *seqq.* for Sight. Plato distinguished three fires, namely (1) that which comes from the eye, (2) that which comes from the object, its colour, (3) the fire of daylight. The second and third are ultimately indistinguishable. See on this Beare, 46–7.

(p. 74) v. Tim. 65–7.

§ 5. (p. 75) Cp. Phil. 21 c. Memory and feeling are required to make a human experience.

(p. 76) v. Theæt. 184.

memory: v. Phil. 34 a.

λήθη: Phil. 33 e, *ἔστι γὰρ λήθη μνήμης ἔξοδος*. The state

indicated by λανθάνειν, when the soul is unaffected, is finally called ἀναισθησία. Cp. Augustine's use of *non latere* for sensation (p. 339).

(p. 77) Phædo, 73 b, μάθησις ἀνάμνησις ἐστιν. The antecedent of this is ἐπιστήμη, not αἴσθησις: cp. Phædo, 73 e, and Laws, 732 b., ἀνάμνησις δ' ἐστὶν ἐπιρροὴ φρονήσεως ἀπολειπούσης (quoted Archer-Hind, ad loc.).

association: v. Phædo, 73 a.

(p. 78) In Phil., 34 b, ἀνάμνσις denotes recollection in the ordinary sense, with no reference to its transcendental use: the psychic character of the process is the essential point whatever the reference is to ideas or the Ideas.

The term φαντασία is not in Plato a fully developed technical term. Its emergence from common into scientific language is seen in the Platonic use of the verb: e.g. Theæt. 152 b τὸ δέ γε φαίνεται αἰσθάνεσθαί ἐστιν. Soph. 264, "φαίνεται," δὲ ὃ λέγομεν σύμμειξις αἰσθησέως καὶ δόξης.

CHAPTER VIII

§ 1. (p. 79) For example of historical retrospect v. Phædo, 96 b.

(p. 82) Phil. 38 b ἐκ μνήμης τε καὶ αἰσθήσεως δόξα.

Cp. Charmides, 159 A, δόξα arises from αἴσθησις. Theæt., 179, distinguishes three terms: πάθος (impression), αἰσθήσεις and αἱ κατὰ ταύτας δόξαι.

§ 2. (p. 83) For the comprehensive character of the term αἴσθησις see Theæt. 156 B, where it includes ὄψεις τε καὶ ἀκοαὶ καὶ ψύξεις καὶ καύσεις καὶ ἡδοναί γε δή καὶ λῦπαι καὶ ἐπιθυμίαι καὶ φόβοι καὶ ἄλλαι.

§ 3. (p. 87) v. Republic, ix. 583, where the question of relativity is fully discussed.

natural: see especially Tim., 64. "The nature of pleasure and pain must be conceived thus: an affection contrary to nature, when it takes place forcibly and suddenly within us, is painful: a sudden return to the natural state is pleasant: a gentle and gradual process is imperceptible: and one of an opposite character is perceptible."

(p. 88) v. Phil., 34 *seqq.*

thirst: v. Republic, iv. 435 *seqq.*

When Plato speaks of σῶμα ἄνευ ψυχῆς (Phil., 50 d) it must be remembered that this does not imply a purely physical affection: no affection is "without soul" in the sense in which soul equals consciousness and knowledge: an affection is said to belong to the body only as being originated by a physical change.

For union of pleasure and pain v. Phædo, 60 c.

(p. 89) v. Tim., 64.

(p. 90) Cp. Parmenides, 156 d.

CHAPTER IX

§ 1. (p. 92) The theory of education is found most fully in the Republic: the material for this and the next paragraph is drawn from the Dialogues generally: specific subjects (e.g. Eros, p. 95) may be traced by reference to the Index in Jowett, Dialogues of Plato, V.

§ 2. (p. 97) Proportion: v. Philebus 64. Plato evolves no definite doctrine of "the mean," but employs this and similar terms *passim* to express that idea.

§ 3. (p. 98) On this "sense" v. Sext. Emp. Adv. Math. vii. 145. *Aristotle:* cp. Eth. Nic. 1147 b 17 and Burnet's Note. On theory of pleasure v. Eth. Nic. 1152 b 8, 1153 b 5, and Burnet pp. 330, 336.

§ 4. (p. 99) For Xenocrates v. Zeller, Plato, 581 ff: Aristotle, De An. 404 b 27: Sext. Emp. Adv. Math. vii. 147. This division of the soul comes from Timæus, 69 c. Strictly speaking there are no *parts* of the soul according to Plato: and the term "mortal" cannot be applied to soul at all. Plato must have meant to indicate by the term "mortal" those functions which are due to union with the body. For the whole question v. Phædo, Ed. Archer-Hind, p. xxxii.

CHAPTER X

§ 1. (p. 100) On the ascending scale of life v. Lewes, 187, where interesting comparisons with later theories are made. "Instead of the three kingdoms—mineral, vegetal, and animal—which moderns have borrowed from the alchemists, he made the more philosophical division of Inorganic and Organic." Aristotle recognised intermediate forms: his examples are unfortunate, but the sponge and sea-anemones were correctly designated animal (Lewes, 191–3).

(p. 101) On Aristotle's relation to the animists (Stahl) v. Lewes, 223. This "animism" conceives mind to be the animating principle. Aristotle, on the contrary, maintained "that mind is only the highest manifestation of life."

(p. 102) For Plato and Aristotle "life" is a term for the whole of which motion, sensation, etc., are aspects. So, e.g. in De An., 413 a 20, the distinction between ἔμψυχον and ἄψυχον is in τῷ ζῆν. In 403 b. the distinction is stated in more detail as κινήσει καὶ τῷ αἰσθάνεσθαι.

§ 2. (p. 103) Hence the full definition (De An., 412 a 27): "Soul is the first actuality of a natural body having in it the capacity of life. And a body which is possessed of organs answers to this description" (transl. Hicks, 51).

axe: De An., 412 b 17.

So in De Gen. An., 726 b 22, no part is really such without soul (e.g. a hand).

(p. 104) See De An., 412 a 25 *seqq.* and comments of editors, especially Rodier. The interpretation here given is a paraphrase of Themistius, Sp., 75.

parts: see De An., 413 b 15, 411 b (on unity), 432 a (discussion of the idea of "parts of the soul").

adopts: e.g. Eth. Nic., i. 13.

§ 3. (p. 105) See on this G. H. Lewes, Aristotle (chapters ix., x.).

(p. 106) The connexion between the psychic state and the physical condition is stated in De Part. An., 692 a 23: fear is due to lack of heat and is (physically) a cooling process.

brain: v. De Part. An., vii. 652 a 24 and *passim.*

CHAPTER XI

§ 1. (p. 107) v. De Somn. 454 a 9: ἡ δὲ λεγομένη αἴσθησις, ὡς ἐνέργεια, κίνησις τις διὰ τοῦ σώματος τῆς ψυχῆς ἐστί.

Cp. De An. 416 b 33.

discrimination: De An. 424 a 5; 428 a 4. That this is the fundamental character is shown in Analyt. Post. B. 99 b 35, animals have δύναμιν σύμφυτον κριτικήν ἣν καλοῦσιν αἴσθησιν.

receptive, etc.: 424 a 18.

(p. 108) See especially De Gen. et Corrupt. 323 a 30; De An. 416 b 32, 417 a 20.

§ 2. (p. 109) De An. 434 b 11; De Part. An. 656 a 6 (Beare, 87).

De An. 425 b 29, implies this double scale and its relations. 429 a 31 states a corollary; after too powerful a stimulation the sense is temporarily lost, i.e. the derangement persists just as there is a persistence of effect in φαντασία or after-images.

(p. 110) Quoted from Hicks, note to De An. 424 a 2.

§ 3. (p. 110) The actual organ of touch has not been clearly stated by Aristotle. See De Sensu, 439 a 1, and note by G. R. T. Ross in his edition. The question is fully discussed in Beare, 190. Gomperz goes too far (Gr. Denker, iii. 139). The key to Aristotle's theory is the fact that he believes there ought to be

a medium; the exact medium was beyond his science. The "Tastpapillen" (Gomperz) alone satisfy Aristotle's principle; not knowing these Aristotle has a principle without a fact.

(p. 112) The medium of hearing is called by the commentators διηχὲς; that of smell, δίοσμον. These terms agree in form with the name for the medium in sight, διαφανὲς. On the difficulties of the subject v. Rodier, note to De An. 419 a 32.

spirits: v. 456 a 1–29, quoted Beare, 120.

(p. 113) Aristotle does little more than hint at this significant aspect of λόγος as reason materialised in articulate sounds. See further remarks in Chaignet, Essai sur la Psych. d'Aristote, p. 407. In later writings (of the Stoics, Philo, etc.) a mystical element enters into the idea of rational sounds (see p. 253); v. De An. ii. 8. For the idea of materialised reason v. Gen. An. 786 b 20, τοῦ δὲ λόγου ὕλην εἶναι τὴν φωνήν. φωνή is the generic term of which speech is a species; διάλεκτος is the term for articulated sounds (Rodier on 420 b 8), those which are clearly separated; it includes speech and instrumental music. Cp. Hicks; note on De An. 420 b 8.

(p. 114) See this point excellently treated in Beare, 82. The passages there quoted are De An. 425 a 4; De Sensu, 438 a 5.

συναύγεια, a term in vogue in the Academy after Plato's time, according to Prantl (v. Beare, 45).

(p. 116) The following passage throws considerable light on Aristotle's position: "If a woman suffering from scarlet fever looks at herself in a mirror, the surface of the mirror will become suffused with a kind of bloody mist; and this mist, if the mirror be quite new, can be rubbed off without difficulty. The cause is that the eye not only receives impressions from without but reacts upon external objects setting them in motion. The eye is full of blood-vessels, and the blood being in commotion and inflammation, the eye, though we cannot detect it, is agitated and feverish: the air is moved by this and conveys the motion to the surface of the mirror" (see Lewes, 172). The passage (here slightly altered) is De Insomniis, 460 a. Hammond remarks that Roger Bacon accepted this fiction.

brain: this is probably repetition of a current medical view. Cp. p. 53 and references to Hippocratic writings.

§ 4. (p. 117) There are difficulties in the understanding of Aristotle's exact meaning: for a discussion of the points v. Beare, 334.

(p. 118) ζωτικὴ ἀρχή in 737 a 5; cp. 469 b 6. Siebeck, 2, 137, and his references on p. 493.

τὸ θερμὸν, of the nature of fire but not actually fire (see 736 b 33).

On sleep v. 456 a-b. On death, 479.

CHAPTER XII

§ 1. (p. 121) Cp. the discussion of desire in Plato, Rep., bk. iv. 436 B. The doctrine was a cardinal point in Greek dialectics.

"*Shared by all.*" In De Sensu, 442 b 5 the "common sensibles" include also "the rough and the smooth, the acute and the obtuse where there is mass"; and here the statement runs "common to all . . . or at least to sight and touch." In De An. 418 a 15 error is said to arise when to the special perception, e.g. of colour, is added an assertion of place or substance. This is because the special sense has a power of discriminative judgment; but a judgment involving a common sensible is properly synthetic; in the synthesis lies the possibility of error. So also at 442 b 5. Aristotle is aware that at this point judgment proper enters into the result (see Stewart, note to Eth. Nic. 1142 a 27).

(p. 124) On the difference between De An. 418 a 18 and De Sensu, 455 a 12, see Rodier's note on former passage. His conclusion seems sound. If we speak simply of consciousness we have a common element; if we think of a specific state of consciousness the specific sense (sight or hearing or any other) must be taken into account. The two are therefore complementary. Chaignet (Essai sur la Psych. d'Arist. 384) quotes Sir W. Hamilton: "The word consciousness has no equivalent usually or familiarly employed in Greek psychology." But the Greeks understood the fact quite well, and *συναίσθησις* implies it. Hamilton's point would have been clearer if he had said where the distinction between consciousness and self-consciousness is to be found. Aristotle seems to have seen this point; v. Met. 1074 b 33.

§ 2. (p. 124) On these topics see (*a*) De An. 429 a 1 and Rhet. 1370 a 28 (the definition of imagination as decaying sense); (*b*) De Memoria *passim*.

(p. 125) See De Mem. i. 449 b 4 *seqq*. At 449 b 31, "*διὸ μετὰ χρόνου πᾶσα μνήμη*." So at 449 b 25, "when one actually remembers, he must recognise in consciousness that previously he had heard or perceived or thought of the thing remembered." This shows that memory is an experience in which the essential element is the consciousness that a similar experience had occurred before in the individual's time; not merely "in time," because that includes history which a man knows as past, but not as his own past. At 449 b 32 memory is said to be retention (*ἕξις*) of a sense-modification. This must be taken to mean that retention is the link between actual sensation and memory: memory being more than retention.

The "Laws of Association" are named in De Mem. 451 b 18.

To recall a previous idea we must use a movement which is connected with the required movement either by being (1) the same, or (2) having occurred in the same time, i.e. that with the required movement, or (3) being part of a whole (so that if we have A, B, C out of A, B, C, D, D can be excited through A, B, C).

The phrase "Association of Ideas" is unfortunate; ideas are not the required factors: Aristotle rightly speaks of the motions, the physical basis of ideas. The "law of neural habit," as stated by James, is nearer to Aristotle's point of view. Hobbes was practically quoting Aristotle (see the chapter in James, i. 550, or Maher, Psychology, 201). It is necessary to remember that Aristotle speaks of "motions" with no idea of neural processes, and yet with an *objective* significance that makes his theory distinct from a mere cohesion of ideas as such. In De Mem. ii. 451 b 16 the difference between Aristotle and Plato is seen. Aristotle gives three terms for the two (like, unlike) named by Plato; and treats association as an act of volition.

§ 4. (p. 126) Post. Analyt. 100 a (from sensation comes memory, and from repeated memories comes experience; many memories make one experience. The essential thing is the "halting" of one sense-element; round this the others collect and group themselves; hence retention leads to conceptual thinking).

(p. 127) See De Mem. 452 b 17. For discussion of this difficult topic v. Beare, 319.

CHAPTER XIII

§ 2. (p. 132) "*αἰσθητική φαντασία* converts the sensation of an object into an idea of it which attracts or repels; *λογιστική* (called *βουλευτική* in De An. 434 a 7) *φαντασία* enables the calculative faculty to marshal reasons which will appeal to *ὄρεξις*." Stewart, Eth. Nic., note to 1114 a 32.

never thinks: De Mem. 449 b 31; De An. 431 a 17.

light: De An. 429 a 3, *τὸ ὄνομα* (*φαντασία*) *ἀπὸ τοῦ φάους εἴληφεν.*

§ 4. (p. 136) For statement of these points see especially De An. iii. 9–11; Eth. Nic. vi. 2 (with Stewart's note; the main contention of this note is rejected by Burnet in his edition of the Ethics, note *ad loc*). The metaphysical element referred to is the doctrine that God is the ultimate *ὀρεκτόν*; this does not affect the analysis of particular actions; the end of all ends is really the *summum genus* of *ὀρεκτά*. The *ἀρχή* of the action is the point from which it starts. This may be either (*a*) a result of *ἐπαγωγή* or (*b*) due to *αἴσθησις*. See Stewart on Eth. Nic. 1098 b 3 and the excellent statement there given of the way in which both these are universal.

§ 5. (p. 139) v. 126 a 8.

science: v. 1140 b 22; 1142 b 33. On the whole subject v. especially Ethics, book vi.

(p. 145) θιγγάνων καὶ νοῶν in Metaphysics, 1072 b 21; cp. 1051 b 24.

deliberates: on βούλευσις as ζήτησις v. Eth. Nic. iii. 3, 1112 b 20.

(p. 146) See for βούλησις 1111 b 26: the term "wish" is not exactly equivalent to βούλησις. For reason (διάνοια δ'αὐτὴ οὐθὲν κινεῖ), 1138 a 36. On φυσικὴ ἀρετὴ, 1144 b 1 (Eth. Nic. vi. 13).

§ 6. (146) On types of character divergent from the normal v. especially Ethics, bk. vii. 1–8. The term "bestiality" by no means covers all that Aristotle means by θηριότης. That term clearly means for Aristotle all conditions which fall short of complete human development: in some cases fear is so exaggerated as to be irrational, a primitive trait thus emerging and reducing the individual to an animal-like condition. Had Aristotle any idea of civilised man as a product of evolution in whom primitive latent instincts might revive? The sentiment of 1149 a 7 (Ethics, vii. 5) is at least strikingly like a modern view of "agoraphobia," which James (Psych., ii. 421) compares with the "chronic agoraphobia of our domestic cats." That reference to cats seems to be exactly the kind of θηριώδες not included in the common use of "bestial."

(p. 147) Parallel of sleep, etc., 1147 b 6.

§ 7. (p. 148) On classification of objects v. Eth. Nic. vi. 3 and iii. 3 (1112 a 21–3 with Stewart's notes). Metaphysics, 1026 a 13 is a summary of the doctrine.

That the basis is sensation is shown in De An. 432 a 4–9. Cp. Anal. Post. i. 18 (81 b 5). De An. 412 a 25 contrasts θεωρεῖν and ἔχειν.

(p. 149) "Do not owe their origin, etc." So apparently De An. iii. 4.

(p. 154) This analogy, ὥσπερ πλωτὴρ πλοίου, at 413 a 9 (De An. ii. 1).

CHAPTER XIV

§ 1. (p. 156) On Theophrastus v. Diels, Doxographi Gr.; Siebeck, ii. 162 (Index for other points); Zeller, Aristotle (E.T.), ii. 392.

§ 2. (p. 158) References in Zeller, Aristotle, ii. 423.

§ 3. (p. 158) Siebeck, ii. 164: the tendency is toward denial of immaterial substance (Sext. Emp. Adv. Math. vii. 349, μηδὲν

παρὰ τό πῶς ἔχον σῶμα). Lucretius (iii. 132) rejected this form of materialism.

4. (p. 159) On Strato, Siebeck, ii. 165. Zeller, Aristotle, ii. 466 and notes referring to Simplicius Physics, 225 a ; Sext. Emp. vii. 350.

CHAPTER XV

2. (p. 164) ψυχή is divided into (*a*) the principle of life, (*b*) reason. Sometimes the four terms are given as separate stages, e.g. Themistius, De An. ii. 64 (quoted by Adamson, p. 271). We then have ἕξις, φύσις, ψυχή, νοῦς.

The φύσις becomes ψυχή by a process of cooling ; hence, according to Chrysippus, the name (cp. p. 278). The souls of animals are intermediate between the φύσις of plants and ψυχή of man ; Stoic writers seem to have thought some animals had ψυχή in the proper sense and some had only φύσις (Siebeck, ii. 169).

ἕξις ; an Aristotelian term used in this sense in post-Aristotelian writers. See Pearson, Fr. of Zeno, 43 = Themistius, De An. ii. 64, 25, for these three terms.

On instinct v. Siebeck, ii. 212 and note 60, p. 498. The nature of animals was a subject of particular interest to Seneca, e.g. De Ira, i. 3, muta animalia humanis affectibus carent ; they lack human virtues, " sed etiam vitiis prohibita sunt." This immunity of beasts follows from the two premises, vice is due to reason and animals lack reason. Galen (De Placit. iii.) seems to have overlooked this point (v. Lauret, 21).

3. (p. 165) Siebeck, ii. 167. Cleanthes used the argument from affections. Chrysippus argued that the division of soul and body after death implies a relation in life. Stoic materialism has no exceptions outside of logical distinctions ; if a name is always the name of something the names of actions are names of something and must denote immaterial objects. Thus that which cuts and that which is cut are material ; but " cutting " is immaterial. Thus there are immaterial objects of thought but no immaterial agents or patients. The materiality of psychic states is shown in Sext. Emp. vii. 39, πᾶσα δὲ ἐπιστήμη πῶς ἔχον ἔστι ἡγεμονικόν, ὥσπερ καὶ ἡ πῶς ἔχουσα χεὶρ πυγμὴ νοεῖται. Cp. on virtues, p. 180.

(p. 166) *blood :* being an ἀναθυμίασις.

(p. 167) This is κρᾶσις, where " there is complete (διόλου) interpenetration, but the quality of each constituent is preserved " (Adamson, 271 n.). See Zeller, 137. This " mingling " differs from the " mixing " of earlier theories ; for " mixing " implies a fusion producing a new result, what in J. S. Mill's time was called " chemistry " (of ideas e.g., in the mind).

breast : so Galen : reason is not in the head because the utterance

(φωνή) must come from the inner speech (λόγος), and this is one with discursive reason: hence, as utterance comes through the throat, the reason must be in the chest, not the head (Galen, de Hippoc. et Plat. Plac. ii. 241 [R.P.]).

§ 4. (p. 168) Plut. de Plac. Phil. iv. 11 (R.P.). Modern sensationalism as formulated, e.g., by Locke springs from this Stoic position.

(p. 169) So Siebeck, ii. 187, where see references to D.L. vii. 157 and Plutarch, Epit. 15 (in Diels, 405 a 27).

§ 5. (p. 170) On φαντασία v. Plutarch de Pl. Ph. iv. 12 and D.L. vii. 50 (R.P.).

(p. 172) "Self-evident." This term (κατάληψις) "has caused much trouble to interpreters," as Adamson (Development of Greek Philosophy, p. 280) remarks. Adamson's view is probably right. After the discussion in Plato's Theætetus it was impossible to use a theory of correct recognition as a theory of true knowledge (v. Theæt. 193 b). The Stoic, starting with images some of which are real and some figments, has to state exactly how the true are distinguished from the false. The attempt thus made is not successful; it does not get beyond that subjective certainty which it was intended to exceed.

The terms are given in Nemesius, De. Nat. Hom. 6 φαντασία is perception in the mind; φανταστόν the object presented; φανταστικόν is δίακενον ἐλκυσμόν (also Sext. Emp. vii. 241), and φάντασμα is ἔφ' ὃ ἑλκόμεθα κατὰ τὸν φανταστικὸν διάκενον ἑλκυσμόν. The visions of delirium are examples of "vain imaginations."

§ 6. (p. 174) On the difference between Zeno and Chrysippus v. Siebeck, ii. 232, and Zeller as quoted there. The older tradition laid emphasis on the organic states; the later schools on the judgment.

(p. 175) *impulse in excess:* it follows that irrational desires are a disturbance of the ideal equilibrium of parts (συμμετρία). See Siebeck, ii. 228.

(p. 176) *affective side:* expressly stated by Galen, De. Plac. v.

Diseases, i.e. abnormal states which are either loss of self-control (ἀτονία) or loss of physical strength (ἀσθένεια); v. Siebeck, ii. 227.

(p. 177) *lapses:* so Seneca, De Ira, i. 16; Epist. ad Lucil. lxxi. (quoted Lauret, 31).

(p. 178) e.g. Zeno speaks of ὀρέξεις, ἐκκλίσεις, ἐπάρσεις, συστολαί.

See Cicero Tusc. iv. 6. The good states are called constantiæ as opposed to perturbationes. The goodness consists in remaining under the control of reason.

CHAPTER XVI

Diogenes Laertius, x. 63, gives most of the material (R.P.): also Lucretius, Bk. iii.

1. (p. 183) *mobility:* so D.L. x. 49.

"Lucretius exaggerated the distinction between the two parts—(1) animus or mens, and (2) anima by the choice of his Latin terms for them. Our Greek authorities speak of the former only as the ruling part of the soul, and the latter as the soul in general" (Hicks, 268). In Lucretius, iii. 421, they are declared a single substance.

(p. 184) v. Stob. Ecl. Phys. 798 (R.P.); Luc. iii. 227.

3. (p. 188) The Epicurean word is ἐπιβολή; in Lucretius it is injectus animi. Zeller takes φανταστικὴ ἡ ἐπιβολή to mean an impression on the senses. Woltjer (Lucretius, 93) takes the opposite view, and seems to me right. In thought, as in action, the mind contributes something. The φανταστικὴ ἐπιβολή is like the διανοίας ἐπιβολή in being an element added from the side of the subject. In Cicero, De Nat. Deorum, i. 49, we have mentem intentam, on which Mayor writes: "The independent action of the mind is needed (1) to distinguish particular images: so Lucretius, iv. 802, explaining how it is that the mind only perceives a small part of the images which throng to it from all sides: (2) to interpret them by meditation" (v. De Nat. Deorum, i. 147).

The extent to which Epicureanism admitted the person's activity has been too much obscured, because the idea of declination has been treated as a wild imagination, thanks to the De Finibus.

(p. 191) Even Zeller (p. 451) seems to make too much of it. Epicurus has already said that the soul has no sensation unless united with the body. The Stoic had spoken of rational joy and non-sensuous pleasures. The question raised by Epicurus is an old one in Hedonism—What is a pleasure if it is not a feeling in our organism? It is nothing; therefore all pleasure is corporeal, somatic. As Zeller notes (p. 451), σὰρξ is flesh, σῶμα includes soul. Epicurus was aiming to keep discussion down to distinctively human pleasures.

CHAPTER XVII

§ 1. (p. 193) For the criticism of this "conviction" v. Sext. Emp. Adv. Math. vii. 411, οὐ τοίνυν ἔχει τι ἰδίωμα ἡ καταληπτικὴ φαντασία. For the phrase quoted v. Sext. Emp. Adv. Math vii. 155 (R.P.).

§ 2. (p. 194) Material in R.P. chiefly from Sext. Emp. vii. 159, 166.

§ 3. (p. 195) For the dualism of Panætius, v. Rohde, ii. 322. The terms are given in Nemesius. Cp. Zeller, Eclectics, 47; Cicero, Tusc. i. 78, on denial of immortality.

(p. 196) On Posidonius, Rohde, ii. 323; Zeller, Eclectics, 68. See section in R.P.

§ 4. (p. 196) Stob. Ecl. i. 58.

§ 5. (p. 196) See Chaignet, iii. 205–6; Siebeck, ii. 166.

CHAPTER XVIII

§ 1. (p. 200) v. Max Müller, Six Systems, 99.

(p. 203) Müller, Six Systems, 70, "there is really but little room in it (i.e. Vedânta) for psychology or kosmology." Empirical psychology is meant.

(p. 204) Deussen, p. 306, quotes, "The spirit hastens to that state in which, fallen asleep, it no longer experiences any desires nor sees any dream image." See Sacred Books of the East, xxxiv. 273, and Deussen, 305.

(p. 206) Self not same as vital air v. S.B.E. xxxiv. 274.

perfume: v. S.B.E. xxxiv. 33–8.

(p. 208) The heart v. S.B.E. xxxiv. 39–40.

v. Deussen, op. cit. 97, for statement of doctrines in Châṇdogya and Taittirîya.

(p. 209) References to texts in Deussen, 283. For importance of the heart, p. 287.

The fluids are named in Brihadâranyaka, iv. 3, 20 (Deussen, 288). The explanation is given, p. 289, from Châṇdogya, 8, 6, 1.

Subtle body; as opposed to the "gross body"; v. Deussen, 242, 280; M. M. Six Systems, 301. This "body" is called Sûkshma-sarira in the Vedantic, Linga-sarîra in Sânkhya philosophy. The accounts of it are not clear, but what is said here seems to be true for all descriptions; obviously it is an "inner man," analogous to the "soul" of Greek atomism or the Pneumatists; v. M.M. Theosophy, or Psychological Religion, 305.

self-absorption: v. Deussen on the turîya (p. 311).

Gaudapâda, i. 12–16, there quoted, runs, "Neither of truth," etc.

(p. 211) For the Sânkhya philosophy see especially Deussen, op. cit.; Max Müller, Six Systems; Davies, Hindu Philosophy; Sacred Books of the East, vol. xxxiv.

(p. 212) Quotation from M. M., Six Systems, 256.

(p. 215) On Buddhist views v. Rhys Davids, Hibbert Lecture,

1881, on Indian Buddhism. The text here follows p. 91 of that book: "That fact," etc.

The final insight is into impermanence of the self (p. 211).

§ 2. (p. 216) Material in Wallis Budge, Book of the Dead; also, Maspero, Renouf, and Naville.

§ 3. (p. 220) Zend Avesta (S.B.E., iv.).

Max Müller; Gifford Lecture, 1892 (Lect. vi.).

(p. 221) Description abbreviated from the Hâdhokht Nask, as quoted in M. M. op. cit. 195.

§ 4. (p. 222) Cp. Cumont, Oriental Religions in Roman Paganism, 141.

S. Dill., Roman Society from Nero to M. Aurelius (bk. iv. ch. 6.).

Bigg, Christian Platonists of Alexandria (p. 237).

(p. 226) For an account of the Hermetic writings v. Petrie, Personal Religion in Egypt before Christianity. This passage is taken from p. 56. On p. 39 *ibid.* v. references to translations by Mr. G. R. S. Mead, which are the real sources.

Part II

CHAPTER I

§ 1. (p. 231) v. Delitzsch, 266 (E.T.). Some data for this account have been derived from Delitzsch, but his interpretations are peculiar. Considerable information may be gleaned from Hastings, Dictionary of the Bible, and Hatch, Essay iii.

§ 2. (p. 232) "Psychical function is ascribed to the peripheral, as well as to the central organs, in accordance with the animistic idea of each organ as a self-contained element with its own qualities." "The eye is an entity with a moral and psychical life of its own," etc. (H. W. Robinson, Mansfield College Essays, 275). Robinson notes 851 instances of the use of heart; liver, kidneys, bowels are also used, but less often.

§ 3. (p. 232) The ethical dualism belongs to the later parts of the O.T. "Hebrew has no proper term for 'body' just because physical and psychical life were not dualistically separated" (Robinson, 276). For Hebrew terms and later equivalents v. note to p. 260. The chief terms are—

(1) Nephesh, breath-soul, allied to neshāmah, the physical breath or wind.

(2) Ruach, which varies in meaning according as the use is pre-exilic or post-exilic.

It overlaps nephesh, but is ultimately distinct through being also a term for the breath of God.

CHAPTER II

§ 2. (p. 241) See Quod Deus Immut. 30 (E.T. i. 371).
De Migr. Abr. 39 (ii. 92).
(p. 242) De Conf. Ling. 37 (ii. 41).

§ 3. (p. 243) De Gigant. 2 (i. 331); De Ebriet. 26 (i. 473).
dual: Leg. Alleg. iii. 55 (i. 149).
dæmons: De Gigant. 4 (i. 332), "Souls and dæmons and angels . . . are one and identical in reality."
(p. 244) See "The worse plotting against the better" (De eo quod det.), 23 (i. 262).
De Leg. Alleg. ii. 7 (i. 86). Here occur the terms ἕξις φύσις ψυχή, Stoic words.

§ 4. (p. 244) Physiology particularly in i. 262–4 (referred to above).
(p. 245) De Leg. Alleg. i. 4 (i. 54) for the number seven.
(p. 245) On the senses Leg. Alleg. ii. 12, iii. 16–19.
(p. 246) Seal and wax, v. Quod Deus. Immut. 9 (i. 351).

§ 5. (p. 246) Leg. Alleg. ii. 14 (i. 92).
(p. 247) Leg. Alleg. iii. 20 (i. 124).
"*As in*," *etc.* Quod Deus Immut. 10 (i. 351).
(p. 248) De Mundi Opific. 51 (i. 43).
See De Mutat. Nom. 39, where ἀπόσπασμα is used and then ἐκμαγεῖον substituted "ὅπερ ὁσιώτερον εἰπεῖν τοῖς κατὰ Μωϋσῆν φιλοσοφοῦσιν." When Philo uses ἀπόσπασμα "he guards himself against the inference which might be drawn from it that the essence of man is separate from that of God." God's nature is not cut (τέμνεται) and separated part from part. Only the "tension" of it varies (ἐκτείνεται: clearly in Stoic sense of intensive changes, i. 209).

§ 6. (p. 249) "I am not ashamed," De Migr. Abr. 7 (ii. 50).
"Therefore if," etc., Quis Rerum Div. Her. 14 (ii. 107).
(p. 250) De Migr. Abr. i. (ii. 43), ἀφορμὴν εἰς σωτηρίαν παντελῆ.

§ 7. (p. 251) On dreams and contemplation De Migr. Abr. 34 (ii. 85). Also the treatise, "On Dreams sent from God."
(p. 252) On sympathy De Migr. Abr. 32 (ii. 83).

§ 8. (p. 253) Stoic "tension." See above p. 248. Hatch remarks that "πνεῦμα is regarded as the underlying cause which gives to the several forms of ψυχή not their capacity, but their energy." This is true: though we cannot translate Pneuma into Force, it certainly represents primarily the energy that sustains all Being.
(p. 254) On modes of acquiring virtue see Drummond, ii. 320 and note.

CHAPTER III

1. (p. 255) For Eudorus, v. Stobæus, Ecl. i. 1 ; ii. 50. Also Chaignet, iii. 103.

2. The ideas of Plutarch are expressed in different parts of his works. The most important are contained in the Theosophical Essays (translation by King, Plutarch's Morals, Bohn's Library).

(p. 257) See Siebeck, ii. 183 and note. Plutarch is not very clear or consistent. We have to remember that Posidonius taught an ethical dualism and yet did not deny the essential unity of man. Galen de Hipp. et Plat. Plac. iv. 515 explains this by saying that Posidonius (and Aristotle) avoided the terms "parts" or "forms" (εἴδη with generic distinctions), and used "powers" (δυνάμεις), which suggests the various activities of one substance.

The word "assents" is justified by Plutarch's use of συγκαταθετικόν (adv. Colot. 26).

(p. 258) See for these distinctions, "On the apparent face in the moon's orb" (28). The first death on earth separates soul from body; the second takes place in the moon, and is the separation of mind from soul. The proper place of mind is the sun.

(p. 259) See his treatise, On the Failing of the Oracles. This is an interesting landmark as coming between the Hebrew ideas of revelation and the traditional Greek theories. See Bigg, Neo-Platonism, pp. 90 *seqq*. Plutarch is half-way to the doctrine of Plotinus, but only half.

fall: see in Siebeck, ii. 308, comments on this and references.

(p. 260) See the treatise, De Soll. An. and Siebeck, ii. 222.

CHAPTER IV

1. (p. 261) As Sabatier (L'Apôtre Paul) says: "Les racines de la pensée de Paul sont dans l'Ancien Testament" (quoted Agulhon, 11). For a brief résumé, see Mansfield College Essays, 267 ; Hebrew Psychology in relation to Pauline Anthropology, by H. W. Robinson. The Hebrew terms correspond roughly to the Pauline, viz. nephesh = ψυχή = principle of life; ruach = πνεῦμα = breath or spirit = soul as divine influx.

The Hebrew lēb = heart is matched by the "heart" (καρδία) in some cases, by νοῦς as human intellect, and by conscience (συνείδησις) in others. The inward parts are less often mentioned, σπλαγχνὰ in eight cases only, e.g. Philemon vii. for emotion.

§ 2. (p. 263) So φρόνημα τῆς σαρκός (Rom. viii. 6); θελήματα (Eph. ii. 3); ἐπιθυμία (Gal. v. 16, 17, 24); νοῦς (Col. ii. 5, 18). The last is significant of the new spiritual doctrine; reason is "natural" for Christianity, not "divine," as Plato would say. The πνεῦμα henceforth stands above νοῦς, and is distinguished from natural breath or "wind" (ἄνεμος in St. Paul) more accurately than in the Hebrew terminology (cp. Siebeck, ii. 157, and Cor. i. 15, 35).

(p. 264) Siebeck, ii. 340, has emphasised the importance of the term ἐπίγνωσις, which in St. Paul denotes knowledge not as scientific knowing but as conscious experiencing. Cp. Col. i. 9, ἐπίγνωσις τοῦ θελήματος τοῦ θεοῦ ἐν πάσῃ σοφίᾳ καὶ συνέσει πνευματικῇ.

CHAPTER V

§ 1. (p. 266) The Apologies of Justin Martyr are included in the Cambridge Patristic Texts. A translation is included in the "Ancient and Modern Library of Theological Literature." This is the work of Bishop Kaye, and his preface contains the important points. Tatian's views are compared with those of Justin by Kaye: the main point of interest is the use of the doctrine of Pneuma as connecting the life-principle and spirit of man with the "dæmons" (cp. Siebeck, ii. 363). Dæmonology figures largely in the writings of this period.

§ 2. (p. 268) On this view of philosophy v. Bigg, 49, "Philosophy is a gift not of devils but of God through the Logos." "Clement vacillates," but Strom. v. 14, 89 maintains at length the idea of "theft."

§ 3. (p. 269) Fragm., 797 (Sylburg), λαβὼν ἀπὸ τῆς γῆς . . . τῆς πολυμεροῦς καὶ ποικίλης ὕλης μέρος ψυχὴν γεώδη καὶ ὑλικήν ἐτεκτήνατο (Ziegert, 17).

(p. 270) The σπέρμα πνευματικόν. This is a divine seed: καὶ ἐνέσπειρεν ὁμοούσιόν τι αὐτῷ ἐνθεὶς δι' ἀγγέλων.

§ 4. (p. 271) See chiefly Strom. vi. 16.

discrimination: διακρίνειν τὰς φαντασίας καὶ μὴ συναποφέρεσθαι αὐταῖς (Strom. ii. 408 B).

§ 5. (p. 272) v. Strom. vi. 16, πρὸς τὰς πράξεις διὰ τούτου πορεύεται τὰ κατ' ἔννοιαν καὶ διάνοιαν (quoted Ziegert, 49).

On δισσὰ πνεύματα v. Bigg, Christian Platonists, 76. The important passage is Strom. vi. 16.

impulse: ζήτησις is ὁρμή (Strom. vi. 15, 25). Cp. vi. 12, 5.

(p. 273) Strom. vi. 16, 135.

Strom. vii. 3, 16.

§ 6. (p. 275) See Strom. ii. 2, 3, 4. Clement has the spirit of the saying, credo ut intelligam, "Mit recht hat Bigg (Christian Platonists, 58) von dieser Situation erklært, 'There is then no third term between a self-communication of the divine and absolute scepticism'" (Verkuyl, 44). The Christian writers should be estimated by the philosopher on this basis. It will then be clear how largely the idea of God was the ultimate term of an epistemology by no means despicable.

See Strom. ii. 2, 9, ἡ μελέτη τῆς πίστεως ἐπιστήμη γίνεται.

halt: in Strom. iv. 22, 143, there is this interesting piece of philology: τήν πίστιν ἐτυμολογητέον, τήν περὶ τὸ ὄν στάσιν τῆς ψυχῆς ἡμῶν. So ἐπιστήμη is a condition at which the soul "stands," i.e. terminates the process or movement of becoming.

(p. 276) vi. 643 A, φιλαυτία δὲ πάντων ἁμαρτημάτων αἰτία. This comes from Plato, Laws 732 b.

CHAPTER VI

§ 1. (p. 278) See De Principiis, ii., ch. vi., § 6.

motion: see De Princ. iii., ch. i., § 2.

§ 2. (p. 279) See Denis, 249, and passage quoted (in Psalm iv., v. 7).

(p. 280) "By freedom he means more than responsibility." Fairweather, 167: "The rational creature has his environment given to him: it is beyond his power to command the success of his own action, and even the decision to act is dependent upon earlier decisions. After these deductions are made, and in view of the fact that all rational existence must ultimately find its goal in God Himself, what is there left to the province of free determination? What appears as freedom is in reality nothing else than the necessary evolution of the created spirit."

§ 3. (p. 281) Contra Celsum, v. 15. The passage is rather remarkable, partly modern in idea and partly a strange analogy. Only "the man of straw," so to speak, can be burned in this fire.

visions: the question arises, What is prophecy? The reader may be referred to the second chapter of Geo. Adam Smith's Book of the Twelve Prophets, or to a fuller discussion in chap. ix. of A. B. Davidson's Old Testament Prophecy. The latter author says (p. 132) that the tradition of the early Church followed Philo, who "agreed more with Platonic ideas than with the Old Testament." Origen shows a reaction against the doctrine of Philo which involved the idea that intellect gives place to the action of a Divine Spirit. The fact seems to be that in Philo the Platonism is only a small leaven of mysticism. Origen certainly resists the movement toward ecstasy, but in this he went toward rather than away from Plato.

CHAPTER VII

§ 1. (p. 282) Galen, v. 602 *seqq.* See further in Siebeck, ii. 269.

(p. 284) See Zeller, Aristotle, E.T. ii. 492. Sinews and nerves were not distinguished, but called νεῦρα indiscriminately. Galen made the distinction.

On Praxagoras, v. Siebeck, ii. 271.

rhythm: recorded in Pliny, Nat. Hist. v. Wellmann, 188. Herophilus here allies himself with the methods of Aristoxenus; there was probably nothing more than the idea of regular and irregular beats; but why bring in music to explain this?

§ 2. (p. 285) On Asclepiades, v. Zeller, Eclectics, 29, 81.

For Athenæus see Wellmann, 132. The material is in Galen, i. 457 *seqq.*, xix. 356, and *passim.* References are given in Wellmann.

§ 3. (p. 287) For Galen see especially Chauvet (brief but clear); Siebeck *passim;* Zeller, Eclectics.

(p. 289) Galen, ii. 573, v. 703 (v. Siebeck, ii. 282).

§ 4. (p. 290) Zeller, 367.

(p. 291) Citations in Siebeck, ii. 273 and note 81.

In Galen, iii. 741, iv. 374.

§ 5. (p. 294) Siebeck, ii. 221. Galen, i. 49, v. 724.

self-consciousness: see Galen, v. 644; Siebeck, ii. 336.

(p. 295) Galen, viii. 884; Siebeck, ii. 195.

(p. 296) For the diseases see Siebeck, ii. 291, where by a diagram is shown the analogy of physical and mental diseases. The idea is Stoic. Galen made a distinction according as the disease occurs in the imagining or thinking activities of soul.

CHAPTER VIII

§ 1. (p. 298) Siebeck, ii. 374, brings out the significance of this: "da die Seele von Gott stammt und das Erkennen in ihrem Wesen liegt, so kann das Vernunftlose an ihr nicht, wie Plato meint, wesentlich sein: es ist vielmehr auf eine zunehmende Verderbniss der Seele in folge des Sündenfalles zurückzufuhren."

§ 2. (p. 299) Enn. i. 1, 3, iv. 2, 1. In the Firmin-Didot edition Eusebii Præp. Evang. xv. 10 is quoted, giving an interesting discussion adversus Aristotelem.

All degrees: see Enn. iv. 2, 2.

§ 3. (p. 301) Enn. iv. 2, 2; 7, 3.

(p. 303) Enn. i. 1, 4.

rejects: most explicitly in iv. 2, 2.

(p. 304) iv. 3, 22, ὡς τὸ πῦρ πάρεστι τῷ ἀέρι.

The term *πάρεστι* is so continually used as to be almost a technical term, cp. *παρουσία*.

§ 4. (p. 305) Enn. i. 1, 2, iv. 3, 26.

§ 5. (p. 312) Enn. iii. 6, 3–4.

CHAPTER IX

§ 1. (p. 313) The De Censu Animæ was written to refute Hermogenes, who maintained that the soul was material. It may seem at first that if the soul is not material it is not corporeal. Tertullian maintains that it is not material but is corporeal. The reason for this is to be found in the Stoic terminology still used by Tertullian. For the Stoic all that acts or suffers comes under the head of corporeal. The soul, therefore, is a " body," though it is admittedly a unique kind of " body." This seems to have been the form in which realism was expressed in this age, and Tertullian's doctrine is amply stated if we say that he believed the soul to be real.

Copious references are given in Kaye. The account here is little more than a summary of the De Anima, ch. 4, 5, 6. The " vision " is given in ch. 9.

(p. 314) De Anima, 18, on functions.

seeds : Kaye, 153.

§ 2. (p. 316) De Opificio, ch. 17. Lactantius admits that it is easier to say what the soul is not than what it is. Such terms as " tenuis," " subtilis " show that Lactantius thought of it in terms of matter. On the other hand, it is incorporalis (Inst. vii. 9, 7 ; 21, 1), invisibilis (iii. 12, 2), tactum visumque fugiens, etc. It is interesting to note that in Inst. vii. 9 Lactantius uses the argument for the reality of the imperceptible which Lucretius (i. 267) had used to prove the atom, viz. that the wind is invisible and yet known. The fallacy is the same in both.

(p. 317) See especially Inst. vii. 4, 12 ; 11, 7 ; 17, 22, and *passim.*

(p. 319) See the De Ira *passim.*

§ 3. (p. 321) On the mediating nature v. De. Op. xvi.

For the scale of Being see De. Op. viii. As man has vegetative, sensitive, and rational activities, so he has also a carnal, a natural (*ψυχικήν*) and spiritual nature. This is supported by quotations from St. Paul (v. 412).

(p. 322) On the Making of Man De. Op. v., " You see in yourself word and understanding, an imitation of the very Mind and Word. Man has likeness to God only while he has Love."

(p. 323) On the place of the soul v. De Op. xii., an elaborate discussion of theories.

(p. 324) This unity is stated in De. Op. xiv.

(p. 325) See De. Op. xviii. ; De Anima et Resurrect. *passim.*

(p. 326) "As to the fantastic nonsense that occurs to us in sleep, we suppose that some appearances of the operations of the mind are accidentally moulded in the less rational part of the soul." The intellect is inactive, hence absurdity of dreams. Gregory is prolix on this theme and gets to no new or sound conclusion. Some dreams are sent from God: these are activities of the intellect which are confused because the instrument (the senses) are relaxed.

§ 5. (p. 329) See Dománski, 21, where Nem. S. 72=30 is paralleled by Plato, Phædr. 245 c.

(p. 330) On the question of the soul's creation, v. Dománski, 42–4.

light: so Plotinus, iv. 3, 20, quoted D. 64.

(p. 331) *acts*: so D. 67. Nemesius here follows Plotinus. The point is a necessary deduction from the doctrine that soul has neither quantity nor parts.

CHAPTER X

§ 1. (p. 335) De Ver. Rel. 39, 72, "noli foras ire: in te ipsum redi: in interiore homine veritas habitat." See Windelband, 276 and note.

§ 2. (p. 335) See x. 761 b.

creation: De Gen. ad litt. vii. 12, 21, etc.

(p. 336) *indestructible: ibid.* vii. 43.

light and air: ibid. vii. 25.

(p. 337) The insistence upon Will is an expansion of Clement's doctrine of Faith. The will to believe is the first essential, and it is the same as the will to know: "si non potes intelligere, crede ut intelligas: præcedit fides, sequitur intellectus" (Sermo. 43, 4; 118, 1). Augustine has before him the problem of reconciling primitive faith and philosophy; he sees that faith is an element in all life, but also that it cannot be a passive acceptance of dogma; it must be a belief that coexists with striving after fuller knowledge. The relation of these is well shown in Sermo. 43, 9; "intellige, ut credas, verbum meum; crede, ut intelligas, verbum Dei."

§ 3. (p. 338) The "imperium" of the soul is continually asserted. See De Quant. An. 13, 22: "Substantia quædam rationis particeps regendo corpori accommodata."

action: Referred to in Confessions x. vii (11): "A power whereby I imbue with sense my flesh" (Pusey's trans.). This is also found in the animals. Cp. De Gen. ii. 5: "sentire non est corporis sed animæ per corpus."

See De Trin. xiv. 4, 6 for statement that the soul always *is*, and is the basis of all other manifestations of being.

(p. 339) De Quant. An. 3. Sensation is omnis passio corporis non latens animam. Sensus is per corpus non latere: scientia is per rationem non latere. The negative phrase is curious, as though one should define consciousness as the cessation of unconsciousness. The reason is that awareness is for Augustine the emergence of permanent soul-contents into actual mind-contents. After all, potential is a negative term and so is subconscious; we know both by virtue of getting beyond them. Augustine reverses the usual method and defines the real state genetically, i.e. as emergence from the assumed prior state, non latere after latere.

4. (p. 340) Frequently stated in two or more terms, e.g. De Trin. gives memoria intelligentia voluntas.

The subject of memory shows most clearly the Neo-Platonic strain in Augustine. See Plotinus, Enn. iii. 26 (*supra*, p. 307). The following are relevant passages: Conf. x. 8; De Musicâ vi. 8; De Trin. xv. 21. On Laws of Memory, see De Musicâ vi. 11; Conf. x. 30; Conf. x. 11. These passages give statements of an informal kind about the strength, repetition, order, and revision of thoughts; and these are aids to memory.

(p. 341) See especially De Trin. x. 5, 7, xiv. 6, 8 (the soul knows itself, being as it were a memory to itself: tanquam ipsa sit sibi memoria sui).

found: see in the Confessions x. 10, 17 to xi. 18, xx. 29, xxiii. 33, xxiv. 35. The canon is, "ea quæ invenimus non alibi quam in animo nostro invenimus" (De Immort. An. iv. 6).

(p. 342) v. Martin 31 and refs. with the phrase "quanta difficultate sanatus oculus interioris hominis."

This subject has been excellently treated by Martin, 19–25. The passages in Aug. are scattered; a few are cited as specimens:—Soliloq. i. 6, 6: The soul cannot see before it is cured. De Mor. Eccl. ii. 3: rationem præcedat auctoritas. As authority demands faith, this implies the credo ut intelligam doctrine. The point is made clear in De Utilit. Credendi, xiii. 28, which Martin (p. 25) calls "la seule page totalement vraie que . . . un illustre philosophe ait écrite."

5. (p. 346) Augustine's terms are (1) animatio, (2) sensus, (3) ars, (4) virtus, (5) tranquillitas, (6) ingressio, (7) contemplatio.

As movements these are respectively de corpore; per corpus; circa corpus; ad seipsam (sc. animae motus); in seipsam; ad Deum; apud Deum (mansio). (De Quant. An. 4.)

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