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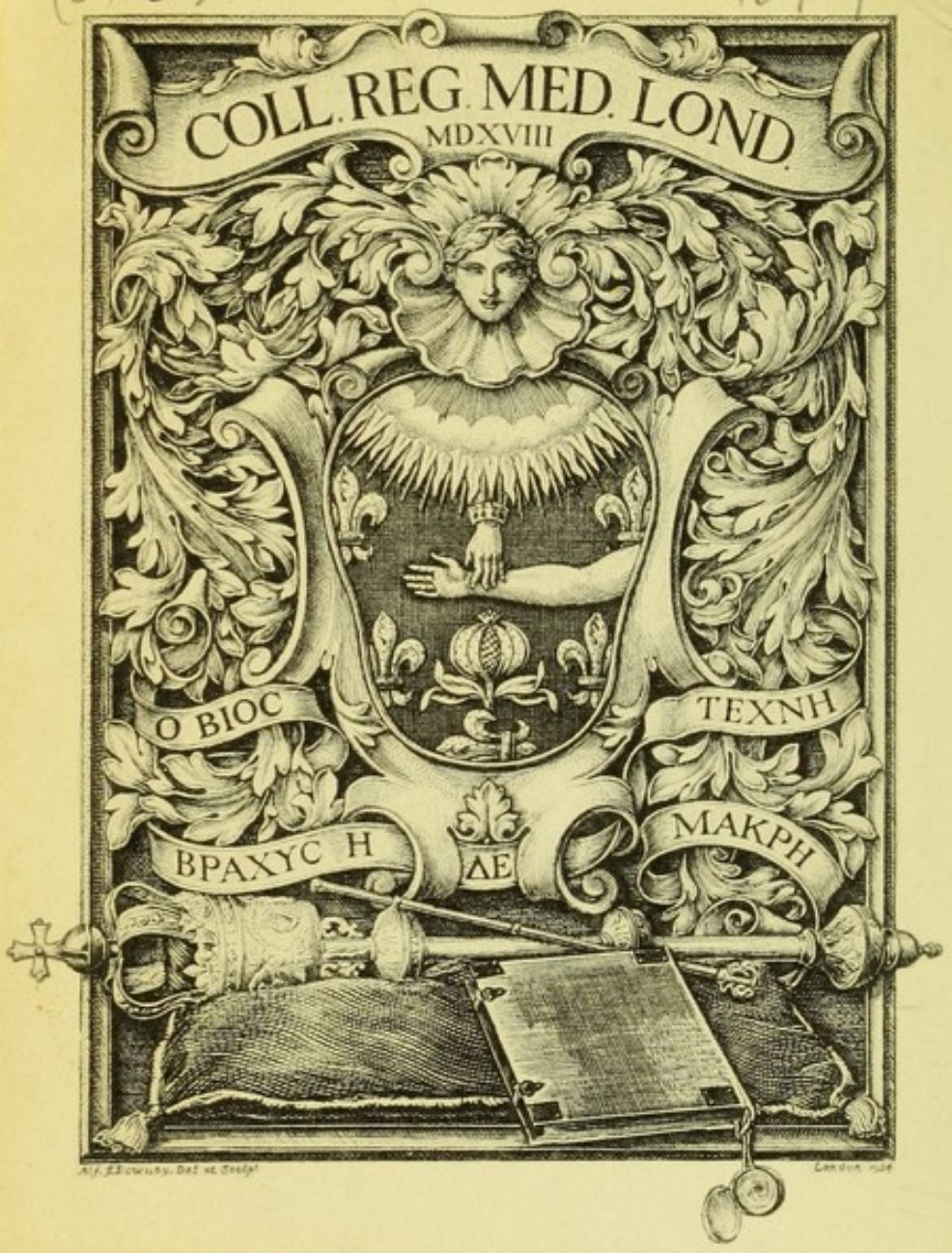

SKETCH

OF A

SYSTEM

OF THE

PHILOSOPHY OF THE HUMAN MIND.

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HUMAN MIND.

PART FIRST.

COMPREHENDING

THE PHYSIOLOGY OF THE MIND.

BY

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EDINBURGH,

PRINTED FOR BELL & BRADFUTE, MANNERS & MILLER, AND WAUGH & INNES;

AND FOR

LONGMAN, HURST, REES, ORME & BROWN, LONDON.

1820.

ADVERTISEMENT.

AS in the present state of Dr BROWN'S *health, it is quite impossible for him even to hope to finish his Text Book in the course of the present Session; and as he is at the same time very desirous, that those who are attending his Class should be able to avail themselves as much as possible of the part already completed; he has thought fit, however awkward it may be, to publish it as a Fragment.*

COLLEGE OF EDINBURGH,
5th March 1820.

PREFACE.

THE following Outlines of the System of Philosophy of Mind which I have delivered for many years in the University of Edinburgh, are intended chiefly for the benefit of those who may be attending my Course of Lectures, or may be desirous, after such a course, of reviving the train of thought which it had been the object of my Lectures to render familiar to them.

To other readers, I am aware, that so slight a Sketch, unaided by illustration, of

a System which contains, as I flatter myself, many original views of the General Phenomena of the Mind, and many new analyses of some of its most perplexing phenomena, can scarcely be expected to be distinctly intelligible, or at least must be in danger of appearing to involve unnecessary refinements and subtilties; when all that seems paradoxical in so brief a statement might have been shewn, in a fuller discussion, to be absolutely necessary for a just exhibition of the phenomena which it is my office in my Lectures to analyze and arrange. I trust, however, that if there shall be any readers of my little volume beyond the number of my pupils, they will do me the justice to consider these Outlines merely as outlines, and ascribe at least some portion of the difficulty which they may feel in the perusal, not to error or obscurity of the opinions themselves, but to the absence of those illustrative views, for which my Lectures afford space, but

which are precluded by the narrow limits of a mere abstract.

Whatever other imperfections may be found in the opinions of which the following abstract exhibits a feeble sketch, it will not, I hope, be imputed to them that they are the opinions of one who has accustomed himself to think after any particular School. There is no department of Science in which this sort of error seems to have been so prevalent as in the Philosophy of Mind; not, certainly, as has been sometimes supposed, because inquiry in that department must relate to phenomena that are too simple to admit of any great difference of opinion with respect to them, but from the influence of a few primary and diffusive errors, which have passed in ready transmission from inquirer to inquirer, and have vitiated accordingly in the same manner, or nearly in the same manner, all the investigations of which they have formed a part.

The great defect of the System of Philosophy of the Mind, which has been generally prevalent in the northern part of the Island, so as to distinguish it as the seat of a particular School of Metaphysics, seems to me to be a redundancy of division, arising partly indeed from imperfect analyses of the complex phenomena of thought which a nicer observation might have shewn to be in their elements the same, but still more from indistinct notions attached to the words *Faculty* or *Power* of the Mind, and to the processes that are termed *Operations* or *Acts* of those Powers; by which a sort of mystery has been thrown over the simple sequences of the Phenomena of the Mind, the relations of which to each other or to certain bodily changes, are all which those words can be justly employed to denote.

The view of the mental phenomena which I have taken in the following pages,

—a view which it appears to me of the utmost importance for simplicity and accuracy of investigation to have constantly before us while we are endeavouring to philosophize on them,—is that which considers all our feelings of whatever order, Sensations, Thoughts, Emotions, simply as *states of the mind*, that bear to each other, or to corresponding affections of our bodily frame, certain relations, either of *reciprocal antecedence and consequence*, by which we distinguish them as Causes and Effects, or of *virtual comprehensiveness*, by which it is impossible for us not to regard some of them as complex and involving, virtually at least, certain simpler feelings as their elements. From the beginning of life to its close the mind has existed, and is known to us only as thus existing, in various states of changeful feeling; the feeling at each moment being its state at each moment, that continued till the new state of some other feel-

ing was more or less rapidly induced. The whole series of these feelings, therefore, has been the whole series of its states: and it is in our power to philosophize on these changes of mental state, as we philosophize on any of the changeful phenomena of the material world which they indirectly indicate to us; to fix by internal observation the order of their succession, or to mark any other relation which they may seem mutually to bear.

When this view of all the processes of sensation, thought and emotion, as mere states in which the mind is capable of existing in certain circumstances,—and of the laws of mind as the laws which regulate the mere succession of these states, or, in other words, as the general circumstances in which alone the changes of state take place, —has once been made familiar, there will, I conceive, be far less difficulty in comprehending the principle of my arrangement,

and the various analyses on which the minuter parts of that arrangement are founded. I know, indeed, that it is very possible, to become still more obscure, in striving to get rid of the darkness of mystery which may thicken on us in our very struggle to escape from it; and I cannot flatter myself with the certainty of exemption from this danger. But it is a danger which all must encounter who endeavour to give greater simplicity to science: and it fortunately happens in such cases, that, while the evil of the failure may be personal only, the advantage of success may have a wideness of distribution, to which, in the light that is gradually spread from inquirer to inquirer, there may be no limits but the limits of philosophy itself.

In stating the reasons of my dissent from the opinions of others, it would have been much more agreeable for me, in many instances, to qualify this opposition by ex-

pressions of the respect which I feel for the great talents of those from whom I am sometimes most reluctlantly obliged to differ: and I am aware, that the absence of such expressions, where dissent is so frequent, may give occasionally an air of harsh contradiction and of eagerness to innovate, that are very foreign from the spirit of free but reverent inquiry in which I venture at all times to examine the truth or error even of opinions that have been sanctioned with the most general and lasting admiration, and which I do not scrutinize less rigidly, for sharing the admiration which others feel. It must be remembered, however, that the necessary brevity of mere Outlines, which precludes the use of phrases of insignificant courtesy, affords little opportunity for indulging in the language even of merited respect;—and it scarcely allows room indeed for any other species of praise, than that which is implied in the examination itself, as mark-

ing that the opinion examined is one of which the accuracy, even where there is so little space for minute notice, has been counted worthy of particular inquiry.

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INTRODUCTION.

THE Philosophy of the Human Mind, in its fullest extent, may be regarded as comprehensive of many sciences.

1. *That which perceives* is a part of nature as truly as *the objects of perception* which act on it, and, as a part of nature, is itself an object of investigation purely *physical*. It is known to us only in the successive changes which constitute the variety of our feelings: but the regular sequence of these changes admits of being traced, like

the regularity which we are capable of discovering in the successive organic changes of our bodily frame. There is a PHYSIOLOGY OF THE MIND, then, as there is a *physiology of the body*, —a science, which examines the phenomena of our spiritual part simply as phenomena, and, from the order of their succession, or other circumstances of analogy, arranges them in classes under certain general names; as, in the physiology of our corporeal part, we consider the phenomena of a different kind which the body exhibits, and reduce all the diversities of these under the names of a few general Functions.

II. If these arrangements could be conceived to be so fully and accurately made, that not a single phenomenon of the mind or of the living body had been unobserved, nor an injudicious systematic place been in any one instance assigned, from a preference of a less important to a more important relation of the kindred phenomena, the Physiology of the Mind and of the Body would be alike complete. But some of the mental phenomena are of such a nature, as of themselves to give rise to a distinct science. After in-

quiring what has generally been the conduct of mankind, and therefore what may generally be again expected in certain circumstances, we have still to inquire, in relation to that conduct, what *should have been*, and what *should be*, in those circumstances, as morally fit to be done: and though this ETHICAL SCIENCE, if very minutely traced to its source, may be found to be only a mode of stating the physical order of succession of certain feelings that arise on the contemplation of certain actions, it still relates to feelings of so peculiar a kind, and of such comprehensive influence on the whole of human life, as justly to deserve a separate consideration.

The science of ETHICS is itself twofold; as it is purely *speculative*, and as it is *practical*:—in the one case, inquiring into the feelings to which we owe our general notions of moral propriety or impropriety of conduct; in the other case, applying this knowledge to the various circumstances in which man can be placed, and stating, with relation to these circumstances, what it would be right or wrong for him, in the particular situation supposed, to do or to omit.

III. It is not to the individual agent alone, that such views of conduct, in the greater number of instances, relate. The happiness of others, as far as it is in any degree within our power to promote it, is a primary object of moral regard, which it is guilt to violate or neglect. But the duty of consulting for the good of others, obvious as its directions may be in the ordinary cases of domestic life, is in many cases, particularly in those which relate to remote and extensive interests, of very difficult application. The happiness of our country, or of the still greater community of mankind, is not reducible with the same ease to its simple elements, as the happiness of the individuals that are dwelling around us, whose very wants almost point out, of themselves, the means by which they may be remedied. It is not enough, therefore, to be a patriot or a general philanthropist in design:—before we can expect truly to benefit the world, we must know in what way it is possible to benefit it; for, without this knowledge, which comprehends the distant as well as the near, we may, in lessening the misery of days or months, produce or prolong the misery of ages. A sedulous study of

the means by which public happiness may be most effectually increased and preserved, is hence a part, and a most important part, of public virtue; and the science of POLITICS, in all its extensive bearings on the wealth, the virtue, the liberty, and the security of nations, may be said accordingly, to be comprehended in that general science of moral duty, which it is the object of *Practical Ethics* to develope and apply.

IV. It is not with mankind only, however, and with the other creatures that may be benefited by our kindness, or may suffer from our cruelty, that we are morally connected. The most important of all our relations is that which connects us with the Great Being who formed us, and under whose continued government we live. If it be our duty to look with gratitude to our earthly benefactors, and to love to contemplate their goodness, the same sentiment must lead us, with still more powerful obligation, to contemplate with grateful love that Highest Beneficence to which we owe whatever we possess. In this sense, the investigations of NATURAL THEOLOGY may be said almost to be included in *Prac-*

tical Ethics. Our moral sentiment alone, though there were no other reason to influence us, should prompt us to a devout study of the nature of the Supreme Being, in all his manifestations of it to the creatures whom he has deigned to render capable of adoring him ; and while, with the deep conviction of our dependence on his power, we endeavour humbly to trace his character as the Creator and Governor of the Universe, we are led, by that very character which we trace, to a more confident expectation, — the grounds of which, even exclusively of the light of Revelation, it must be one of the most interesting of inquiries to examine,—that our spiritual existence is not to cease in the mere decay of the bodily elements which surround us, but that He who has been our God in our brief earthly life, will be our God also in the endless ages of a life that is immortal.

Such are the various lights in which the human mind may be regarded,—*physiologically, ethically, politically, theologically.* It is thus the object of many sciences,—but of sciences

that, even when they seem most remote, have still one tie of intimate connection, in the common relation which they all directly bear to the series of feelings of the inquirer himself.

PART FIRST.

THE PHYSIOLOGY OF THE MIND.

SECTION I.

OF THE PHENOMENA IN GENERAL.

CHAPTER I.

OF THE OBJECTS OF PHYSICAL INQUIRY.

In the Philosophy of Mind, as in the Philosophy of Matter, it is not one object only which we have in view: the phenomena, in both, admit of being considered in two lights.

The subjects of inquiry are indeed very different, in these departments of general nature: yet there is a very striking analogy of the objects that must be had in view in both;—an analogy which would be more wonderful, if we did not remember, that it is only by the intervention of mental feelings, that matter itself, in any of its qualities, can become known to us, and that all the processes, therefore, by which we endeavour to acquire a more minute acquaintance with its phenomena, must have a relation, more or less

direct, to the intellect that perceives those phenomena, and that is impressed with the relations which it regards them as bearing to each other. We know our own feelings directly: we know matter only indirectly, as capable of inducing some change in the state of our sentient mind. Beyond the variety of our feelings, therefore, we cannot have any knowledge of the things around us: and accordingly, it is less wonderful, that objects which are measurable, directly or indirectly, by our feelings alone, should admit only of such investigations as have a common relation also to the phenomena of that mind which perceives and measures them.

A little fuller illustration of this analogy may be interesting in itself; and, by the light which it may throw on our notions of the real objects of inquiry in the phenomena of Matter, may, perhaps, also dispel some darkness from our notions of the kindred investigations in the philosophy of Mind.

I. All physical inquiry, with respect to the material universe, has one or both of two great objects in view,—the *composition of bodies*, and

the *sequence of changes* by which they are made known to us as reciprocally *causes* and *effects*. We consider the substances, into the nature of which we inquire, in these two lights alone, *as they exist in space*, or *as they exist in time* ; in the one case, endeavouring to discover what the separate elementary bodies are, that are comprehended in any aggregate before us, and that, under the common name of this aggregate, derive from their mere juxtaposition a unity that is not in them, but only in our imperfect mode of perceiving them ;—in the other case, endeavouring to discover what new appearances they exhibit, and may be expected to exhibit again, in all the variety of circumstances in which they have been, and may be, placed.

1. We term a body *one*, when, from the imperfection of our senses, we are incapable of perceiving the spaces that divide its elementary atoms from each other. But these atoms, which, with finer organs, we might distinguish as separate, are not to be considered as less truly independent substances, because our sight and touch are too gross to discern the exact place and boun-

dary of each. It is not absolute unity, then, which we have in view, but relative unity,—a unity that is wholly relative to us the percipients. The body which we before termed *one*, therefore, we term *two*, *three*, *four*, without the addition to it of a single atom, as soon as we have divided, by any mechanical process, the larger mass into the number of separate masses expressed by those terms;—that is to say, as soon as we have made distinctly perceptible the spaces which divide the smaller masses, that can now without any difficulty be placed at a distance from each other. Such is the species of division that is termed *mechanical*, when masses of atoms, without any internal change, are merely separated, or placed at a greater distance from other masses of similar atoms, that formed with them, before the separation, one larger aggregate; and it is sufficiently evident, that, in this case, the change is merely in the separating spaces, and that the atoms themselves in each separated mass are, after the operation, exactly what they were before it. There is another species of division, however, more intimate than this,—the division which is termed *chemical*,—that does

not merely separate a mass into smaller masses, which may easily be placed near to each other again in close apposition, and of which the atoms continue in the same relative position to each other, but extends to the corpuscles themselves, or at least to congeries of them too minute, even in their combination, to be distinguishable by the senses, and to be separable by a process purely mechanical. But still, though the chemical process be a finer and more extensive one than the mechanical, it is, like it, only a process of separation. It affects the relative position of a larger number of atoms, but it affects their position only, and leaves them, in every respect, the same substances as before. There is nothing creative in mere analysis: what was before, is. We now see in one place the sulphuric acid, in another place the soda, which, in a solution of the neutral salt, were so intimately mixed as to appear to us homogeneous; but when we looked on the solution, we saw, if that word may be applied to a perception so indistinct, every thing which we now see. The mixed atoms which are now separate from each other were separate then, though at distances too minute to come within

the sphere of our imperfect vision; and we require, therefore, the subsidiary art of the chemist, to shew us what has been at every moment before our eyes. Such is the result, or at least the object, of every inquiry into the mere composition of bodies. We wish to know matter as it exists before us in space: and we avail ourselves of many complicated processes of chemical analysis, to know what it is which we have been holding perhaps on the palm of our hand, and considering with the most attentive gaze,—the various corpuscles that existed together undistinguishably at invisible distances, in the space which then seemed to us to be occupied by one continuous body.

2. To know matter *as it exists in time*, is to know more than this juxtaposition of elements with elements. It is to know it as susceptible of various changes,—of all those changes which, in the variety of their ceaseless succession, are commonly termed the *phenomena* of the material world. The great law, which regulates alike our practical expectations and our systems of philosophy, in this respect, is a principle of our na-

ture, intuitive, or independent of all reasoning, —since reasoning, when it is extended from the moment of actual observation to the unobserved past or the unobserved future, must itself be founded on it,—a principle by which it is impossible for us not to believe that the course of nature has been uniform, and will be uniform, in all the simple sequences that have composed, or may hereafter compose it, and that the same antecedents, therefore, have always been followed, and will continue to be followed, by the same consequents. Whatever we observe becomes at once, by the influence of this principle, representative to us of the past and of the future, as well as of the present. We arrange phenomena, accordingly, not merely as parts of one casual sequence, but as *causes* and *effects*, or, in other words, as the invariable antecedents and consequents of the same phenomena in the same circumstances; and, expecting this uniformity of result, we invent the term *power*, not to express any thing distinct and separable from the antecedent itself, but to express the simple relation which we feel of its uniform immediate antecedence to a certain change,—our undoubting belief, that

whenever it has occurred, or may again occur, the event which we have once observed to be consequent, has always followed, and may always, in similar circumstances, be expected to follow again.

To know Matter fully, in accordance with these two views, both as it exists in space, and as it exists in time,—that is to say, to know all the elements of every compound, and all the changes of which they may be reciprocally antecedent and consequent,—would be to know every thing which can be physically known of the whole surrounding system of material things. We may think that it is possible for us to speculate still further; but our speculation, in that case, will be without a distinct object, and its result, if it have any, will be some distinction that is purely verbal, and nothing more.

II. In the philosophy of the other great department of nature, the physical inquirer has the same objects in view, or objects that are at least very closely analogous,—the *analysis* of what is *complex*, and the arrangement of the various feelings or *successive* states of mind, in the re-

gular order of their sequence, as *causes* and *effects.*

That *successive* phenomena, whether of matter or of mind, may alike admit of being arranged as antecedents and consequents in the order in which they occur, no one can doubt; and in this respect, therefore, the similarity of the objects of inquiry in the two departments of nature will be readily allowed. But that there should be inquiries in the physics of mind, corresponding with those of the chemist into the *composition* of bodies, may seem inconsistent with the simplicity and indivisibility which are universally regarded as essential to our very notion of the mind itself:—and it may be the more necessary to dwell a little on this difficulty, as philosophers have been accustomed rather to pass over it without notice, than to treat it with the attention which it deserves.

There would, indeed, be the inconsistency supposed, if the analysis, in Mind, were professed to be strictly the same as in Matter. The mind *is* simple and indivisible. Every feeling of the mind, therefore, being only the mind itself existing in a certain state, must be equally simple

and indivisible; and hence, as there is no real plurality in a sensation or thought or emotion, to admit of integral separation, the analysis, which is real, where self-subsisting elements of matter are detached from other self-subsisting elements, must in mind be virtual only, like the virtual complexity of the feelings on which it is exercised. It must always be remembered, that the feelings which we term *complex*, are, as truly as the feelings which we term *simple*, states of a substance that cannot be divided into elementary parts. But, while we admit this distinction, we must be conscious at the same time, that it is the very nature of certain feelings to *seem* to involve certain other feelings as elements of themselves; and this *seeming complexity*, which it is impossible not to feel, is sufficient for the analysis of the inquirer into mind, who does not attempt to divide a feeling into distinct parts, which it has not, but only traces the feelings to which, on reflection, certain other feelings are thus regarded as virtually equivalent. He knows, that the conception of a Centaur, or the notion of the abstract number four, is one state of one simple substance, as much as the conception of the trunk

and limbs of a horse, or of the upper parts of a man, or the notion either of unity or of the abstract number three; but he knows also, that it is the very nature of that conception, and of that notion, to seem to be comprehensive of the other two; and the virtual analysis, by which he reduces this or other seeming compounds to their seeming elements, is, relatively to those of whose very nature such feelings of equivalence or comprehensiveness are a part, the same thing, as if there were a separate and distinct existence of the objects of thought thus regarded as equivalent, and elementary feelings as distinct, which were truly, and not virtually only, included in the more general feeling that seems to comprehend them.

In the Philosophy of Mind, then, as often as we speak of the analysis of complex feelings, it must never be forgotten, that the analysis of which we speak is virtual, not real,—that it has not for its object what is truly compounded of parts, but a mere relation of seeming comprehensiveness, which, in certain circumstances, it is impossible for us not to feel, of one state of mind to other states in which

the mind has before existed. It is not the less important, however, on that account, as a branch of physical inquiry, nor the less inexhaustible in the results which it affords. Almost every feeling is susceptible of this reflective analysis, in some greater or less degree; and inquirer after inquirer, in the field of mind, may evolve to us unsuspected elements of thought and passion, as chemist after chemist, in the world of matter, presents to us elements that never had been perceived by us, in substances which may have been before us from the moment of our birth.

III. The foregoing remarks have, I trust, prepared us in some measure for the discussions which are to follow. We have seen the nature of the two objects of inquiry in the Philosophy of Mind, analogous to the objects of the physical inquirer in the other department of nature, whose search is directed to the composition of bodies, and to the successive changes which they exhibit; and we have now to proceed to the consideration of the mental phenomena in this twofold view,—analysing what is felt by us as complex,—and arranging them in the order of their

succession, as reciprocally antecedent and consequent.

Before entering on this detail, however, there is a general view of the Mind, with which we cannot fail to be struck,—that it is *capable of existing in various states*,—in states so various, as to constitute, by this changeful consciousness, all the phenomena of our sensitive, intellectual, and moral life.

It is known to us as a substance, only by these varieties of feeling; and it is felt by us as one in all the varieties. What, then, is the nature of this various and diffusive *consciousness*, and of that belief of *identity*, in consequence of which, the phenomena, however diversified, are all recognized as states of one permanent mind?

CHAPTER II.

OF CONSCIOUSNESS.

CONSCIOUSNESS has been generally considered as a peculiar Power of the mind, of which all our various feelings when present, are to be distinguished as *objects*, in the same sense as light is not vision, but the object of vision, or fragrant particles not smell, but the object of smell.

This view, which appears to me very manifestly erroneous, seems to be a part of that general error with respect to the mind, which, after endowing it with many Powers,—that are truly nothing more than certain relations of uniform antecedence of states of mind to other states of mind or to bodily movements,—learns to consider these Powers almost as separate entities, and assigns to each a sort of empire over phenomena,

of which it is itself merely a name, expressive of a certain uniformity in the order of their succession.

Consciousness, in its widest sense, is truly nothing more than such a general name, expressive of the whole variety of our feelings. In this sense, to feel is to be conscious, and not to be conscious is not to feel.

The series of states in which the mind exists, from moment to moment, is all that can be known of the mind; and it cannot, *at the same moment*, exist in *two different states*, one of consciousness, and one of some other feeling wholly distinguishable from it. Whatever its momentary feeling may be, simple or complex,—a sensation, a thought, an emotion,—this feeling or momentary state of the mind, which is said to be only the object of consciousness, as if consciousness were something different from a state in which the mind exists, is truly all the consciousness of the moment.

I am conscious of a particular feeling, means only *I feel in a particular manner*. As far as regards the present merely, it expresses the existence of a particular feeling, but nothing more.

We may, indeed, look back on a particular feeling of the moment preceding, as we look back on some more distant event of years that are past; and from the belief of identity which arises intuitively in such a case, we may give the name of *Consciousness* to this brief retrospect and identification, as we give the name of *Memory* or *Remembrance* to the longer retrospect. But the difference is a difference of name only. The remembrance is in kind the same, whether the interval of recognition be long or short. The whole complex state of mind, in such a case, is in strictness of language *one* present feeling,—one state of the mind and nothing more; and even of this virtual complexity, we find, on analysis, no other elements than these—a certain feeling of some kind, the remembrance of some former feeling, and the belief of the identity of that which feels and has felt. If we take away the *memory* of every former feeling, we take away the very notion of self or identity, and with it every thing that distinguishes the complex feeling which is termed Consciousness, from the simpler feeling of which we are said to be conscious.

It is but in a very small number of our feelings, as they succeed each other in endless variety, that any such retrospects and identifications of past and present feeling, in one self or continued subject of both, take place. The pleasure or pain begins and passes away, and is immediately succeeded by other pleasures or pains, or thoughts or emotions. In such a case, when there is no retrospect beyond the moment, and no notion, therefore, of self, as the continued subject of various feelings, the consciousness of the mind is either the brief simple present feeling itself, whatever that may be, or it is nothing; and when it is mingled with a retrospective feeling, there is no occasion to have recourse to a peculiar Faculty, to be distinguished from the ordinary cases of remembrance, in which there is, in like manner, a retrospect of some former feeling of the mind, together with that belief of identity which is common to memory in all its forms. We do not suppose, that when at one time we look back on some event of our boyhood, at another time on some event of the preceding hour, and, in both cases, identify the subject of the past feeling with that which is the subject of

a present sensation, we exercise, in the recognition at the longer and shorter interval, a power of the mind that is specifically different in the two cases; and there is surely as little reason to suppose such a specific difference, when, in an interval still shorter, the recognition of a common subject of two feelings has regard to a present sensation, and to one so recent in its freshness as almost to seem present still.

CHAPTER III.

OF MENTAL IDENTITY.

In all the variety of our feelings, we believe that it is the same mind which is thus variously affected; and, in accordance with this belief, we use the personal pronoun *I*, to express the common relation of the whole series of these feelings to one self, as the permanent subject of them.

By what principle of our nature is it, that we are impressed with this identity of the subject mind?

I. It certainly is not to the evidence of reason that we can trace the belief. The sensation of fragrance of the last moment, the sensation of sound of the present moment, the joy or grief which I felt a few moments before, have nothing

that seems to indicate the existence of any of these, as comprehended in the others, or even as having any peculiar analogy to them. There is nothing that seems common to them, but the belief itself which accompanies them all.

It is not memory which gives the belief: the truth of the belief is assumed in that very memory. When I say that I, who am now listening to a violin, am the same person who a few minutes before listened to the voice of a singer, and must be the same, because I have been a listener to both, it is evident that I only repeat the affirmation, instead of proving it. In saying that *I* have listened to both, I have already, in this very use of the personal pronoun, taken for granted the identity which I wished to substantiate.

We cannot prove our identity, then, and yet we believe it irresistibly,—as irresistibly at least, as we believe the result of any demonstration. The belief flows from a principle of our constitution, which is as truly a part of it as the principle of reason itself. It flows, in short, from a principle of intuition; and in this, as in every

other case of intuitive belief, it is vain to look for evidence beyond it.

II. To those, indeed, who have paid little attention to the primary evidence, on which demonstration itself, when we trace it back through all its stages, must ultimately be found to rest, and who think that nothing can be true, which has not been proved to be true by a series of propositions, the assertion of a truth, which is to be felt by intuition only, has often afforded a subject of ridicule, as if it were an abandonment of the principles of rigid philosophy. We must not, however, be such very fond admirers of the force of reasoning, as to forget, in our reverence for it, to analyze even reason itself. We must consider what it is with which the process begins, as well as that with which it is concluded: and when we thus examine it in inverted order, and find at every step that the truth which we admit depends on some truth which was before admitted by us, we cannot fail to perceive that all reasoning is intuitive in its primary evidence, and that the proudest results, therefore, of demonstration itself, have their source in some propo-

sition of which we can give no other account, than that it is impossible for us not to believe it to be true.

It will be allowed, that it is very possible, even for philosophers, to acquiesce too soon in the easy faith, that there is no occasion to prosecute any finer investigation; and that the system of Dr REID and of other philosophers, his contemporaries, of the same school, who professed a particular reference in their inquiries to the principle of Common Sense, has in many instances exemplified this too great facility. But the possibility, or even the frequency, of this abuse, does not render it less absurd to deny, that there are principles of intuition in our nature, to some one of which, of no greater force than that on which our belief of our identity depends, the primary evidence of every reasoning is, and must always be, reducible. The error of a thousand philosophers in this respect, should be a motive to caution only, not to rejection of a principle, on the validity of which that very caution must itself be founded.

We have an *irresistible*, *immediate*, and *universal* belief of our identity, as often as we think

of the present and the past. We cannot think of any former feeling as truly a former feeling, without it. The belief in such a case is as much a part of our nature, as either of the feelings, which we identify in their common subject, as states of one sentient self. It has, in short, all the characters of truth which we can find in any proposition, that serves for the basis of any argument of the most demonstrative kind; and it has this peculiarity, that it is itself involved in the very belief which we yield to such a demonstration. When we give our assent to the conclusion of a series of propositions, we give it because we have no doubt whatever that *we* have been *previously* impressed with the truth of the antecedent portions of the series, which established the ultimate truth that now seems to us irresistible.

III. All this reasoning as to the necessity and the force of certain primary truths, it will perhaps be said, may be very just in its general application; and the belief of our identity might be allowed to be marked with sufficient characters of intuition to establish it as of undeniable

evidence, if no counter-evidence could be adduced, intuitive or demonstrative. But is there not in the very phenomena, with respect to which the identity is asserted, evidence of this opposite kind?

I can imagine, for example, the following objection to be put.

The changeful appearances of external things, it may be said, are easily conceivable, because a mass of matter admits of addition, or subtraction, or at least of change of place of the atoms that compose it. But, if mind be, as is asserted, absolutely simple and indivisible,—the same at every moment, without addition, or subtraction, or possible change of parts,—that which is by its very nature so completely incapable of essential alteration, cannot admit of any difference whatever. If strictly identical, it must be the same in every respect. Now we know, that what is called the Mind, far from being at every moment the same in every respect, scarcely presents for two successive moments the same phenomena. It is by its changes, indeed, indirectly, as sentient or percipient, and only by its changes, that all other changes become known to us; and in-

dependently of those varying perceptions, by which it reveals to us the phenomena of the material world, it is susceptible of innumerable modifications of feeling that have no direct relation to them. Without taking into account, therefore, such lasting changes of character, as the mind often exhibits, in different circumstances of fortune or at different periods of life, are not even its more rapid changes, when the feeling of one moment has no resemblance whatever to the feeling of the preceding moment, sufficient to disprove its absolute identity? There is unquestionably in these changes a difference of some sort, and often a difference as striking, as can be supposed in the feelings of any two minds at the same moment. How, then, can that which is so *different* be absolutely *identical?*

Absolute identity, in the strictest sense of that term, and difference of any sort, seem, I own, when we first consider them, to be incompatible: and yet, if such a compatibility be found to be true, not of mind only, but of matter itself, the objection that is founded on the analogy of matter, in the supposed necessity of some integral alteration in its changing phenomena, will lose

the force which that analogy had seemed to give to it. If every material atom be unceasingly changing its state, so as often to exhibit tendencies the most opposite, and yet, in all its changes of physical character, be, without all question, the same substance which it was before; it may be allowed, in like manner, that the mind also, with corresponding diversities of character, may exist in various, and often in opposite states, at different times, and yet be in all these changes of state, whether the diversity be more or less brief or lasting, the same identical substance.

The examination of this compatibility of diversity with sameness in external things, may involve a more subtile analysis of the general phenomena of matter, than has commonly been employed by philosophers. But it is a discussion that is interesting in itself, and that is particularly interesting in the present question, as obviating an objection, the force of which, but for such a proof of exact analogy in the phenomena of the material world, will be felt most strongly by those who are best qualified to judge of such questions.

In the narrow limits of the present Outlines, it is impossible to state the argument in its minuter physical bearings. A single illustration, however, from one of the most familiar of the phenomena of matter, may be sufficient to shew what is meant by that compatibility of sameness and diversity in things without, to which the internal phenomena of mind, in their similar union of diversity and sameness, present an analogy so striking, as to justify the assertion of the compatibility as a general law of nature.

A body at rest, we believe, would remain for ever at rest, but for the application of some foreign force: when impelled by some other body, it moves, and, as we believe, would for ever in free space continue to move onward, in the line of impulse, with a certain velocity proportioned to that impulse. Let us take, then, any series of moments, a, b, c, in the continued quiescence, and any series of moments x, y, z, in the continued uniform motion. At the moment a, every atom of the body is in such a state, that, in consequence of this state, it does not exhibit any tendency to motion in the moment b; at the moment x every atom of it is in such a state, that

in the subsequent moment *y*, though an impelling body be no longer present, it has a tendency to pass from one point of space to another; and thus progressively, through the series *a*, *b*, *c*, and the series *x*, *y*, *z*, the difference of tendency at each moment is indicative of a difference of state at each moment. Every atom of the body, at the moment *y* is, however, exactly the same atom which it was at the moment *b*. Nothing is added to the mass; nothing is taken away from the mass: yet how different are the phenomena exhibited, and consequently how different the tendencies, or physical character, of the identical atoms, at these two moments! Nay more, as the varieties of velocity are infinite, increasing or diminishing with the force of the primary impulse or other cause of motion, and as, in the continual progressive motion, the cause of the particular velocity of that motion at the moment *y* is the peculiar state of the atoms at the moment *x*, with any difference of which the velocity also would be different, there is in the varieties even of such simple rectilinear motion, without taking into account any other varieties arising from any other foreign causes, an infinite

number of states of every atom of every mass, with the same continued identity of the whole: and it is truly not more wonderful, therefore, that the substance to which we give the name of Mind should, without the slightest loss of identity, be affected in succession with joy, sorrow, love, hate, or any other feelings or tendencies the most opposite, than that a substance to which we give the name of Matter, without the slightest loss of identity, should have tendencies so opposite as those by which at one time it remains, moment after moment, in the same relative point of space, and afterwards flies through space with a velocity of which the varieties are infinite. However paradoxical, then, the statement may appear, it may yet safely be admitted, as a law both of mind and of matter, that there may be a complete change of tendencies or physical character, without any essential change; and that absolute identity, in the strictest sense of that term, is consistent with infinite diversities.

CHAPTER IV.

OF THE CLASSIFICATION OF THE PHENOMENA OF THE MIND.

BEFORE entering on any very minute arrangement of the phenomena, some principle must be found of primary division into Classes and Orders.

I. The very old classification of the mental phenomena, as belonging to the *Understanding* and to the *Will*, has little claim to be adopted on the ground of precision, even with respect to the phenomena which it comprehends; and there are innumerable phenomena, which belong neither to the one nor to the other.

The arrangement of them under the *Intellectual Powers* of the Mind, and the *Active Powers* of the Mind, is as little worthy of adoption. It is indeed almost the same as the other, under a

mere change of name. It does not comprehend all the phenomena:—for, how is it possible to class such feelings as Grief, or the Emotion of Beauty, as in any peculiar sense, Intellectual or Active, any more than we could class them under the Understanding or the Will? And it confounds even the phenomena which it does include:—for, if the word *active* have any meaning at all, we are surely as active when we prosecute trains of reasoning or of fancy, as when we simply love or esteem, despise or hate.

II. Let us consider the phenomena, then, without regard to any former arrangement.

The various feelings of the mind are nothing more than the mind itself, existing in a certain state. They may all, then, be designated *states of the mind*, if we consider the feelings simply as feelings;—or *affections of mind*, if we consider the feelings in relation to the prior circumstances that have induced them, and wish to express by a particular word, not the momentary *state* of feeling merely, but the *reference* also to some antecedent on which we suppose the change of state to have been consequent.

With this distinction of an implied reference in the one case and not in the other, the phrases *state of mind* and *affection of mind*, are completely synonimous. They may be used to comprehend all our feelings of every order, that are nothing more than states of the mind, the changes of which are co-extensive with the changeful circumstances, material or mental, that may have induced them.

Of these states or affections of mind, when we consider them in all their variety, there is one physical distinction which cannot fail to strike us. Some of them arise in consequence of the operation of external things,—the others, in consequence of mere previous feelings of the mind itself.

In this difference, then, of their antecedents, we have a ground of primary division. The phenomena may be arranged as of two classes, the EXTERNAL AFFECTIONS OF THE MIND,—the INTERNAL AFFECTIONS OF THE MIND.

III. The former of these classes admits of very easy subdivision, according to the bodily organs affected.

The latter may be divided into two Orders, INTELLECTUAL STATES OF THE MIND, and EMOTIONS. These Orders, which are sufficiently distinct in themselves, exhaust, as it appears to me, the whole phenomena of the class.

When I say, however, that they are sufficiently distinct in their own nature, I do not mean to say, that they are not often mingled in one complex state of mind;—in the same way as when I class separately and distinctly sights and sounds, I do not mean that we are incapable of perceiving visually the instrument of music, and the musician, to whom we may be at the same moment listening. *Sight* is still one state of mind, *hearing* another state of mind; though there may be a complex state of mind that is virtually inclusive of both: and when an *intellectual state* of mind is accompanied with an *emotion*, there is as little difficulty in distinguishing these elementary feelings by reflective analysis, as in distinguishing, by a similar analysis, the elements of the complex sensation of sight and hearing.

There is one Emotion particularly,—the Emotion of Desire,—which, in this metaphysical sense of composition, mingles very largely with

our other feelings, both of the External and Internal Class, and diversifies them so much, in many cases, as to have led to the supposition of many distinct Powers of the mind, from which the peculiar mixed results are supposed to flow. The nature of this illusive belief, however, will be best seen, when we analyze the complex results themselves.

All further subdivision of the phenomena will have a fitter place, when the Orders of feelings are separately considered by us. At present, it is sufficient to understand clearly the leading division of them into two Classes, as External and Internal Affections of the Mind, and the subdivision of the Internal Class into its two Orders of Intellectual States of the Mind and Emotions.

PHYSIOLOGY OF THE MIND.

SECTION II.

OF THE EXTERNAL AFFECTIONS OF THE MIND.

CHAPTER I.

OF THE LESS DEFINITE AFFECTIONS OF SENSE.

THE class of External Affections comprehends all those states of the mind which are the direct consequents of certain affections of the nervous system. It includes, therefore, together with all those feelings which, in the restricted metaphysical use of the word, are termed *Sensations*, and ascribed to the action of particular external things on certain distinct organs of perception, all other feelings which have in like manner their direct source in affections of some part or parts of our sensitive frame, though we may not be equally capable of localizing their seat, or may be little accustomed to make such a reference.

Some of these, which have met with too little notice from philosophers, deserve at least a fuller

examination than has usually been given to them.

I. The most important are our *muscular feelings.*

Our muscular frame would not be rightly estimated, if considered merely as that by which motion is performed. It is also truly an organ of sense.

That it is capable, in certain states, of affording strong sensations, is shown by some of our most painful diseases, and by that oppressive uneasiness of fatigue which arises when any part has been over-exerted. But there are feelings of a fainter kind, increasing in intensity with the exertion employed, which accompany the simpler contractions, and enable us in some measure to distinguish, independently of the aid of our other senses, our general position or attitude. These *muscular feelings* I conceive to form a very important element of many of our complex sensations, in which their influence has been little suspected.

It is not to be supposed, however, that we are able, by a sort of instinctive anatomy, to distin-

guish the separate muscles of our frame, which may have been brought together into play. Our muscular movements themselves are almost always complicated; and our accompanying sensation, therefore, in such cases, is equally complex. But whether the number of muscles employed be more or less extensive, and the degree of their contraction be greater or less, there is one result of sensation which forms in every case one state of the mind; and it is this joint result alone, which we distinguish from other muscular sensations, that may have resulted, in like manner, from various degrees of contraction of the same or different muscles.

II. Under the head of the less definite affections of sense, may be classed also certain elementary feelings of our Appetites.

The complex state of mind to which we give that name, has, indeed, been usually considered as of a distinct order of feelings.

What is commonly termed *Appetite*, however, as in the case of hunger or thirst, is not one feeling, but two successive feelings, which may afterwards, indeed, continue to exist toge-

ther, but of which one, as often as they recur, must, in every instance, have preceded the other. These successive feelings are a *pain* of a particular kind, arising from a particular state of certain nerves, and a *desire* of that which is to relieve the pain. We are not to suppose, in such a case, that, by giving a single name to two consecutive feelings, however convenient the term may be for brevity of expression, we have in any respect altered the nature of the feelings themselves, or altered the place which either of the feelings should respectively occupy in our systematic vocabulary. The pain is still one state of mind, the desire a different state of mind: and though the pain may continue with the unsatisfied desire, it is evident that we must have felt the pain in the first place, before we could have begun to desire its relief. This primary *pain* is an *External Affection* of the mind, like any of our other affections of sense: the subsequent *desire* is an *Emotion*, to be classed with our other desires. As a mere desire, the wish to obtain food or drink, for the relief of hunger or thirst, does not differ, in the slightest degree, from any of our other wishes, which have in like manner in view

some object that is to give pleasure, or remove or lessen pain.

III. With the species of uneasiness that forms, as an external affection of the mind, an elementary part of our more common appetites, may be classed the painful feeling of Anxiety from impeded or vitiated respiration; and various morbid feelings arising from disordered functions; analogous to which, though of an opposite kind, is the pleasurable feeling which attends the healthy exercise of all the functions, when the body is in a state of vigour. But these vague indefinable feelings, however important in their physical relations, when we consider them symptomatically, and however interesting to the physiologist of our bodily frame, are comparatively of little interest in the physiology of the mind.

CHAPTER II.

OF THE MORE DEFINITE EXTERNAL AFFECTIONS IN GENERAL.

THE external affections of the mind, as yet considered, arise indeed directly, like all the other feelings of this class, from affections of parts of the nervous frame: but they are affections which we rarely think of referring to particular organs, or in the reference of which, at least, there is a great degree of vagueness and obscurity.

There are other states of the mind directly resulting from bodily changes of state, of which it is more easy to fix the organic place, and which, after the early indistinct feelings of infancy, are usually accompanied with a reference to external causes. Such are the states of mind, more generally termed *sensations*, when we wish

to express the feelings simply, without the attendant reference, or *perceptions*, when we would express at once the sensations themselves, and the reference to the corresponding qualities of external things, which we believe to have given occasion to them.

These sensations will be considered with greatest advantage in the order of Smell, Taste, Hearing, Touch, Sight; that the slight notice, which is all that the simplest require, may prepare the way for the analysis of those which are more complex.

Before entering on this particular consideration, however, some general remarks may be made, on circumstances that are common to the whole Order.

In the process of sensation, if we include what is corporeal in the process as well as what is mental, there are three necessary parts to be considered; the presence of an *external body*,—an *organic change* immediately consequent on its presence,—a *mental affection*, as immediately resulting from the antecedent organic change or series of changes.

I. Every order of sensations has its particular external cause,—odorous and sapid particles, in smell and taste,—vibratory particles, in hearing, —resisting particles, in the affections commonly ascribed to touch,—light, in vision.

A distinction in this respect is very commonly made by philosophers, of external causes which act *directly*, as in smell, taste and touch, and of others which act *through a medium*, as in hearing and vision. It is a distinction, I allow, which might be convenient for brevity, if understood always in a popular sense, when we speak of hearing and seeing distant objects, but which, if meant to express any real difference in the sort of agency in the two cases, would, as founded on imperfect analysis of the complex phenomena, be unworthy of philosophic admission.

It would be most unphilosophic; because, in that case, from the imperfect analysis of which I have spoken, it would give as the object of perception what is not the real object of the particular sense described. The real object, or real external cause, of hearing, for example, is the vibratory air or other elastic substance itself, which is said to be only the medium of that sense. The

bell which is rung, the drum which is beaten, we may feel with our hands, we may see with our eyes. But when we are said to hear them at a distance, it is as truly the vibratory medium, and it alone, which is the direct object of hearing, as it is the sapid or odorous substance which is the direct object of taste or smell. The *auditory* sensation is of the *sound* merely, not of the *figured masses* which we call a drum and a bell. We learn, indeed, to refer the sensation to one of those figured masses, as its indirect and remote cause; but it is a reference which the sense of hearing never could have enabled us to make: it is the result, as we shall afterwards find, of another principle, which connects the affections of one sense with the results of affections of other senses; as it extends the same connecting influence, indeed, to every other class of feelings of which the mind is susceptible.

This distinction of the real object of the particular sense, in the cases of supposed indirect perception, must not be considered as a verbal one merely. The belief of such complicated agency in perception through a medium,—by the space which it supposed to be intermediate be-

tween the object and sensitive organ, and the room which it therefore gave for hypothetical conjecture to connect the one with the other,—had an almost inevitable influence of the most injurious kind on the general theories of perception, which could not have remained so obscure as they are even at present, if the nature of this single fallacy had been clearly seen.

II. We have next to consider the organic change, that intervenes between the presence of the external object and the consequent sensation.

The brain and its appendages, though specific names have been given to some of these, may be regarded as *one* great *sensorial organ*, of which portions are diffused over various parts of the body, particularly on the parts termed Organs of Sense, but which still, however widely and distantly spread, are in perfect continuity with the whole mass.

Of this great organ an affection of some sort is consequent on the presence of certain external objects at the parts of it which terminate in the organs of sense, and is followed by a corresponding change in the state of the mind: but the na-

ture of the change, by which the state of the sensorial organ in sensation differs from its state before sensation, it is absolutely impossible for us, with our present limited knowledge, to determine, or even to conjecture.

Ignorant as we are, however, of the nature of the change even in a single atom of the organ, and therefore of any series of such unknown changes, it has been generally, or I may say universally, believed, that there is not one instant sensorial change produced by the presence of the object, on which sensation is immediately consequent, but that there is a primary affection of the nervous expansion in the external organ, which is communicated progressively before sensation, from part to part, to the central mass of the brain; and many hypotheses, founded chiefly on supposed analogies of ethereal fluids or elastic cords, have been framed as to the nature of the communication; which have all ended in a return to the simple expression of our ignorance of its actual nature.

That sensation is not the immediate result of the primary organic affection, but that some progressive change of the sensorial atoms in differ-

ent parts of the great organ must always take place before any feeling of the mind can be consequent, may indeed be the more probable supposition; yet it does not seem to me to be founded on such positive evidence, as to preclude all uncertainty on the subject. Instead, therefore, of doubting merely what the nature of the communication may be, we are authorised, I think, to doubt also, whether there be really any such communication as is supposed.

That very slight variations of the external object are readily distinguishable by our senses, is evident; and the communication, therefore, if it take place, as is supposed, from the superficial nervous expansion to the central parts, must be capable of conveying nice differences of the primary organic influence, by a series of changes of some sort, corresponding exactly with those primary varieties. Now there may indeed be some species of fine communication, peculiar to this particular case, and known to us only by the result itself, for which the soft nervous mass may be peculiarly fitted. We cannot deny the possibility of this; because we cannot philosophically deny any thing of that of which we are wholly ig-

norant. But since, if we were to judge from the analogy of every known species of motion, the nerves and the other parts of the sensorial organ would seem very ill fitted, by their position and their texture, for a progressive transmission so nicely distinctive, we may surely require some strong evidence of the necessity of the communication, before we consent to have recourse, for explaining it, to a sort of motion, which we must believe when we assume it as real, to be altogether different from any other species of motion that is known to us.

Is there, then, any evidence of such a necessity? Is there any thing in the central parts of the brain, which marks these as more peculiarly fit, in any state in which they may exist, to be the immediate antecedents of sensation, than the parts of the nervous expansion in the organ? Where all is alike unknown, we cannot appeal to *experience*, to decide the preference; and it would surely seem to us, *a priori*, as probable, that an affection of the mind should follow immediately a change of state of the nervous expansion, as that it should follow immediately a change of state of any equal number of sensorial particles

in the interior of the brain: while, in the one case, it would be easy to understand the distinctness of the separate orders of sensations, as arising directly from affections of remote parts; and, in the other case, there must be allowed to be considerable difficulty in accounting for this distinctness, when, in each particular sensation, a change of some sort is supposed to pass diffusively from particle to particle, in one long line of sensorial matter, from the surface to the central parts, without the slightest lateral communication of a change of any sort, to other central portions of similar matter, that correspond exclusively with the affections of other organs of sense.

We know, indeed, that the cutting of the nerve, or even a compression of it in its course, whether mechanical or morbid, prevents the feeling that would otherwise have arisen. But, surely, this is no proof of the necessity of the supposed communication. We may well believe, that, in a living instrument, so delicate as an organ of sense, a healthy state of the nervous matter may be necessary for those exquisitely fine changes on which sensation depends; and the cutting of a

nerve, therefore, or even the mechanical constriction of it, may be sufficient to destroy that state of exquisite susceptibility, which is necessary for the fine effect. In thus conceiving sensation to cease with a change of state of the superficial nerve, so slight, perhaps, as to be at the moment wholly undistinguishable, nothing more is supposed, than must be supposed, on the other hypothesis, in many cases of temporary or lasting disease. It is often difficult, after a loss of sensitive power, of long continuance, to discover on dissection any morbid difference, in the appearance of the palsied nerve or even of the brain itself, that may be regarded as the cause of the previous insensibility; and in whatever part of the course, therefore, we suppose, in such a case, the state of the sensorial matter to have been so altered as to have been rendered incapable of being the medium of sensation, the incapacitating change must be believed to have been of a kind as little perceptible as the change which a cut or other violence might naturally be expected to produce in the lower part of the injured nerve. We have only to extend to the superficial part, in one case, what we must suppose to be true of some deeper-seated portion of

the great sensorial organ, in the other case; and we shall be as little astonished at the suspension of sensation in the one case as in the other.

The only other argument, with which I am acquainted, in support of the necessity of the central affection, is founded on the false reference of pain which is sometimes made, by those who have suffered amputation, to parts that no longer exist, —to a toe, or finger, for example, of an unexisting leg or arm. But it should be remembered, that these local references which we make, are not original parts of our sensations; they are secondary results of experience, in the many lessons which we are continually learning, in infancy, from the co-existence of our sensations of various kinds. The infant, when he first suffers a particular pain, which he afterwards refers to that part, does not know, that he has a little convex mass, such as he afterwards calls a toe or a finger, at the extremity of other convex masses, which he afterwards calls legs and arms. He has a painful sensation, and nothing more. When the knowledge of particular parts of his organic frame is acquired, he ascribes to affections of them particular feelings; because he has found such

feelings to arise, as often as an external force was manifestly applied to them: and the reference is naturally repeated, when feelings in some degree similar are, from whatever cause, excited again. Now, in contending for the adequacy of the affections of the superficial nerves to induce sensation, it is not meant to be asserted, that the nervous matter in the line of communication with the brain is so different in its very nature from the portions at the surface, as to be unsusceptible of any such affection. When it, too, is exposed in like manner to the action of external causes that would have affected the lower portion if still existing, there may be an affection of it in some degree similar; and if the subsequent sensation also have a certain degree of similarity, it is not difficult to account for the false reference that may sometimes in these circumstances be made. Indeed, as it is partly from this very circumstance of the resemblance of the sensorial matter in the nerves to that in the brain, that I am led to question the general opinion of the insufficiency of the superficial affection to induce sensation, the same reason would lead me, not to view with astonishment, but rather to expect, that sensibility

of other parts of the nerves, on which, and on the false references arising from which, the argument which I have been considering is founded.

That sensation is not the immediate consequence of a certain affection of the nervous matter in the expansion of the particular organ, but requires in every case an affection of particles of similar matter in the central parts of the brain as its necessary antecedent, seems to me, therefore, to have been rather believed without sufficient proof, than substantiated by adequate evidence.

Even if we were to suppose that an affection of the particles of the central mass, as well as of the particles of the superficial expansion, is absolutely necessary before sensation, it does not follow that the affection should necessarily be communicated from particle to particle. The presence of the external object, which must be believed to be capable of inducing the primary change of state, whatever that change may be, in the superficial sensorial matter of the organ, may be sufficient to produce also, at the same instant, that change of state of the other por-

tions of sensorial matter, which is supposed to be necessary, in connexion with it, for the subsequence of the mental affection; in the same way, as in that change of gravitation of the particles of our ocean which follows the appearance of the moon in the heavens, there is an instant change in the whole long line of particles in the unfathomable depth, and not a mere propagation of changes from atom to atom. We may conceive such an immediate change, in sensation, to be less probable than a progressive one: but we certainly know too little of the mode in which external objects affect either the nerves or the brain, to pronounce with confidence, that there cannot be in the sensorial matter such an immediate affection of many atoms, as is exhibited in gravitation, at every moment, by every atom of our globe.

Speculations so subtile as this, however, are probably beyond our power of verifying or absolutely disproving them. All which we know with certainty of the great sensorial organ, between the presence of the external object and the sensation, is, that a change of some sort takes place in it. The nature of the change itself,

and the extent or limits of the nervous or cerebral matter affected, it will most probably be for ever beyond our power to ascertain.

III. The last part of the process of sensation is the affection of the Mind itself.

The parts of the process already considered, belong more particularly to the physiology of our bodily frame. It is the resulting feeling alone, which strictly belongs to the physiology of the mind; though some attention to the preceding parts of the process is necessary, for illustrating the principle of the classification by which the feelings ascribed to sense are arranged as external affections of the mind; and, in some measure also, for illustrating the connexions of sense with sense, by which feelings that have arisen from changes induced in one organ, suggest afterwards, in some of our more complex perceptions, the feelings that have arisen from affections of other organs.

The resulting feelings in sensation are specifically different, as the organs that are primarily affected.

We have now to consider these specific varieties in the order of the senses already enumerated.

CHAPTER III.

OF SMELL AND TASTE.

I. In the variety of feelings that arise after affections of the olfactory nerves, there is nothing to be discovered, that might of itself be indicative of the existence of things without. If the sense of smell were our only sense, we might have the pleasures of mere fragrance, repeated in varied and endless succession; and we might ascribe these changes of feeling to a cause of some sort: but that the cause was of the kind which we now term corporeal, we could as little discover, as if we had been formed without any sensitive organ whatever. We might give, indeed, as now, if the use of language were possible in such a case, the name *rose* to the un-

known cause of one of these delightful feelings; but the name would be as little significant of *matter*, in our present sense of that word, as the word Spirit or Angel. To know the cause, *as matter*, would be to know it as an extended resisting mass; and for informing us of the figure and the hardness or the softness of the beautiful circular crimson flower, with its convex stem, and green flexible foliage, the sensation of fragrance seems to be as little fit, as any other feeling of mere pleasure or pain of which the mind is susceptible.

II. The same remark may be applied to our primary sensations of mere taste, abstracted from every tactual sensation that may accompany them. If we had no other medium than this sense, for acquiring a knowledge of nature, the things which we now term sweet and bitter, would be unknown to us; and the feelings, which we now ascribe to them as their effect, would have been mere pleasures or pains, that began we knew not how or when, and ceased when we were as little capable of inferring the time or the manner of their fading away.

III. It is very different, in the circumstances of that richer complexity of senses with which Nature has endowed us. By frequent co-existence with the sensations afforded by other organs, that have previously informed us of the existence of matter, our sensations of mere smell and taste seem of themselves, ultimately, to inform us of the presence of things without. A particular sensation of fragrance has arisen, as often as we have seen or handled a particular flower; it recalls, therefore, the sensations that have previously co-existed with it, and we no longer smell only; we smell a rose. In taste, in like manner, by the influence of similar co-existence of sensations, we have no longer a mere pleasurable feeling; we taste a plum, a pear, a peach. The suggestion of things external is as quick in these cases, as in any other cases of association; but the knowledge of these corporeal masses is still a suggestion of memory only, not a part of the primary sensations either of smell or of taste.

CHAPTER IV.

OF HEARING.

I. ALL the remarks which have been made in the preceding chapter, on Smell and Taste, are so exactly applicable to the sense of Hearing, that it is unnecessary to repeat them now. We may speak of sounds as pleasant or painful, without wandering from this particular sense: but, when we speak of hearing a particular instrument of sound, we speak always of what we have handled or seen.

II. Sounds have many qualities, expressed by various names; and many of these qualities are accurately distinguished by all who are not absolutely deaf. But there are relations of tones,—the musical relations on which melody and har-

mony depend,—that are scarcely distinguishable at all by some individuals, who are as quick as others to discover the differences of sound in every other variety of it, from the loudest noise to the gentlest whisper. Such individuals are said to be without musical ear.

This particular species of dulness of discernment, is probably the result, not so much of any peculiarity of the sentient mind, as of organic differences which we may never be able to detect.

There are some remarkable analogies, however, in varieties of a peculiar species of sensibility of another organ, in different individuals, which lead me to conceive, that a similar cause may give rise to the difference in both cases.

The phenomena to which I allude, are those of ticklishness, in which, as in music, the lively feeling depends, not on any single organic impression, but on a series of these, to each of which singly those who are not ticklish may be as sensible as others; in the same manner as those who are without musical ear may be as quick as others to be affected by each separate sound in the series of tones, of which, as a se-

ries, they are wholly incapable of distinguishing the musical relations.

III. Sound is the result of vibration, and therefore of organic excitement increasing with the repeated appulse of the vibrating particles; as the particular sensation attendant on tickling is the effect of repeated light touches, which are as little capable of producing it singly, as a single appulse of producing sound. When a simple sound is produced, by the last of the vibratory appulses of which a series was necessary for the production of it, the auditory nerve must of course, as this difference of result shews, have been affected in a livelier manner than during the preceding appulse which was not followed by sensation: and in the brief interval from sound to sound, this increased sensibility, which must die away more or less rapidly in all, may continue for a longer or shorter time, and to a greater or less degree, in some individuals than in others; as a similar increase of excitability continues more or less, with a corresponding difference of pleasurable effect, in individuals who are more or less ticklish. In those who are not ticklish, it is pro-

bable that the parts affected by the primary light motion return very rapidly to their original state, so as to admit of little, if any, increase of effect from repetitions of the motion. Though they feel each separate touch, therefore, and can distinguish the tangible qualities of things as accurately as others, they have no pleasurable feeling attendant on the rapid renewal of these motions; because the state of the surface, at each renewal, scarcely differs from its original state when the motion was begun. In like manner, if the auditory nerves of those who have little capacity of musical delight, return very quickly to their original state; though there may be sufficient increase of excitement, during the moment of the rapid vibration, to produce the primary effect of mere sound, it may not continue longer than the brief interval from note to note; and each note, therefore, though heard simply, like the note that preceded it, may not be attended with any livelier feeling, than if the tones had succeeded each other at the interval of hours.

In this way, when sounds produce no delight as a series, they will, by such persons, from infancy, be valued only for the meaning which they

convey as arbitrary symbols. The verbal differences of sounds, accordingly, will be learned by them, and remarked, as readily as by others; they will remark, too, as readily, the differences of natural tones expressive of feelings that may be interesting to them; but other differences, that give them no delight, and are not interesting to them in any way, will be wholly neglected, and by constant habitual neglect, will at length cease to make any impression whatever.

The effects of attention and inattention to the musical relations of sounds are familiar to every one. All which I have now supposed indeed, as to the dulness in distinguishing these varieties which I ascribe to habitual neglect of them from defect of pleasure, is nothing more than the reverse of the process which takes place in musical education, when attention is particularly directed to such differences. We all know to what extent the ear may be cultivated; that is to say, how quick it becomes, after habitual attention to the mere musical differences of sounds, to distinguish readily differences which, without such cultivation, it never could have detected, but which

now seem to it scarcely less remarkable than the varieties which it was capable of distinguishing before: and what is true of the highly cultivated ear, in those nicer discriminations, is true also of the less refined perceptions of every other ear. They who even in infancy receive delight from sounds as musical, will learn to distinguish more readily these sources of pleasure; while the less gifted individuals, who in infancy receive no pleasure of this kind, will regard only the differences of sounds that are more important to them, and with respect to other differences of no interest, will become less and less quick to perceive what they have uniformly neglected.

A speculation of this kind, however, though founded on a very striking analogy, is perhaps too conjectural for rigid philosophy. It is indeed only on subjects so vague, and so little capable of direct observation or experiment, as the organic differences of musical ear, that such conjectures can be considered as at all allowable.

CHAPTER V.

OF THE SENSATIONS COMMONLY ASCRIBED TO TOUCH.

In the senses as yet considered by us, we have seen only the sources of certain feelings, pleasing, painful or indifferent, which might begin and pass away like any other affections of the mind, without affording the slightest information, as to the existence of a system of external things.

I. What is true of fragrance, and sweetness, and melody, is not less true of warmth and chilness, considered as mere sensations that arise from affections of our organ of touch.

But there are other feelings, commonly ascribed to touch, which are peculiarly distinguished by a reference to external corporeal causes, and which

are supposed to have afforded, primarily and immediately, to the infant mind the knowledge which is implied in that reference.

With the exception of warmth and chilness, —which, as they have nothing peculiar to distinguish them from the varieties of sensation before considered by us, may in the present inquiry be laid out of account,—the perceptions ascribed to touch are only of modes of *extension* and *resistance*, the very compound which we have in view in all our definitions of matter. There may be in matter various other tendencies to excite various other feelings. But whether those other qualities be absent or present we term Matter what is composed of parts and resists our effort to compress it.

To what organ, then, are we to ascribe the external influences, which give occasion to these feelings of resistance and extension?

II. It is not to touch, as I conceive, that either of these is to be traced.

Our feeling of *resistance* in all its varieties of hardness, softness, roughness, smoothness, solidity, liquidity, &c. I consider as the result of

organic affections, not tactual, but muscular; our muscular frame being truly, as I have before stated, an organ of sense, that is affected in various ways, by various modifications of external resistance to the effort of contraction.

If we had never used a single muscle, and knew nothing of the existence of things without, the pressure of a hard substance by any foreign force that directed it on the palm of our hand, might have occasioned an unpleasant feeling; as the cut of a knife, or the application of fire to the same part, would in like manner have produced an unpleasant feeling. But this pain of the bruise would have been all. We should as little have known, in the one case, that the compressing mass was hard, as we should have supposed in the other case, that the flame which burned us was hard. What we now mean, as often as we use that word, is a tendency to resist compression,—a tendency to resist our muscular effort. It has its source in the peculiar muscular feeling which arises in that case; or at least the resulting sensation is a compound of a tactual and muscular feeling, the latter part of which is

that which we have particularly in view as often as we employ the word.

The feeling of resistance, then, as a primary sensation, is a feeling of our muscular frame. It is the feeling which arises, when we endeavour to perform an accustomed contraction, and the contraction is impeded,—a feeling which does not require any very nice discernment to distinguish it from that which arises on the mere touch of bodies, when no muscular effort has been made; though, from the uniform concurrence of the tactual feeling with the muscular, the one may afterwards become representative of the other, and suggest it, in the same way as the primary sensations of vision, by the influence of similar co-existence and suggestion, become representative of distance.

III. But, though *resistance* may not be a direct tangible quality, is not *extension* a quality of this kind? Does not touch, immediately and originally, inform us of superficial shape?

Though it appears to me very evident, that it is not from touch we obtain, primarily, our knowledge of form, I am aware that the denial of that

which has had the sanction of universal belief, may have some chance, like every opinion, however well founded, that is regarded as paradoxical, of being counted little worthy of examination for that reason alone. It is certainly very possible, as the history of philosophy abundantly shews, to dispute long on distinctions purely verbal, and go through the forms of analysis, where there is nothing to be analysed: but the tendency to reject every subtile inquiry, on that account, is one of the many prejudices with which we are accustomed to flatter our intellectual indolence. It is a tendency, however, so strong in most minds, that there are few errors, for which, if they be akin to the mixed mass of truth and error that forms the system of general belief, it would not be easier to obtain admission, than for truths that result from the justest analysis, if they be in opposition to errors which have been generally received.

That we at present seem to perceive figure immediately by touch, I do not deny; though I conceive our tactual perception of it to be far less accurate, than our visual perceptions of the magnitude and position of external things, which it

is now no longer a paradox to consider as secondary or acquired perceptions of vision.

As little do I deny, that, when any hard surface is pressed on the surface of our body, a part of the tactual organ is affected, equal in extent to the impressing surface; and that, if we had any previous means of knowing the figure of our impressed organ as the result of the impression, there could not be any doubt as to the external form. But, if we assume this previous knowledge, we assume the very point in question, and take for granted, as previous to touch, what we yet ascribe to touch as its source. It must not be forgotten, that, before the knowledge of extension has been acquired in some way or other, the infant knows as little of the existence and form of his own organ of touch, as he knows of the existence and form of other external things, and that he cannot, therefore, have any knowledge of a similarity, which can be known only through a knowledge of the similar forms themselves, that are, by supposition, as yet unknown.

Above all, it must be remembered, that the feeling of extension, like every other feeling, is a state of mind, not of matter,—a state of a sub-

stance, which, by its very nature, cannot be of any shape whatever, but is as little square when the bodily surface touches a square, as when it simply grieves or rejoices. The squareness of a portion of the palm of the hand is not a squareness of the sentient spirit. Till the mind, therefore, have acquired, in some other way, a knowledge of the bodily frame with which it is connected, no similarity of configuration of that which is not mind can be known to it; and when it knows this configuration, it has already received its knowledge of extension, and does not need any impression from without, to give it this elementary knowledge.

The confusion in our notions of the mind itself, which is capable of sensation, but unsusceptible of figure, and of the body, which is susceptible of change of figure, but incapable of sensation, is then, as we have seen, one great source of error with respect to the primary mode of acquiring the knowledge of extension.

Another source of error, of the same species, is to be found in the very general neglect by philosophers of circumstances in the other senses, which are truly common to them with touch,

but which, from the permanence of the objects of touch, are very falsely supposed to be peculiar to it, or at least to belong to it in a greater degree than to the others.

It is not in the organ of touch only, that the sensorial matter is of a certain shape when affected. In all the other organs of sense, there is an expansion of similar matter; and when sensation of any kind takes place, there is always a portion of the expanse affected, which, being limited, must always be of a certain figure, whatever its boundary may be. If mere extension of nervous matter affected, therefore, were the only thing necessary to give the knowledge of extension, we should, by smell or hearing alone, have a perception of olfactory or auditory figure, in the same way as we are supposed to acquire the knowledge of tangible figure, from an affection of a similar expanse of nervous matter on the surface of the body.

These arguments, though only of a negative kind, appear to me, I confess, of very considerable strength. But, as they are negative only, let us next examine, more particularly, the phenomena themselves, and consider whether the per-

ceptions, by which touch is supposed to convey to us the knowledge of magnitude and form, be of a kind which marks them more peculiarly as primary or secondary.

If touch be truly the direct and primary sense of magnitude and form, as hearing is the sense of sound, and smell the sense of fragrance, it should be equally the sense of every variety of these, as hearing is the sense of every variety of sound, and smell of every variety of fragrance. It would surely appear either a very singular doctrine of philosophy, or a very absurd abuse of language, to say of the sense of sound, that it is the sense of hearing a violin, but not equally the sense of hearing a harp, which are yet equally direct and primary objects of hearing, as far as the mere sounds of both are concerned; or to say of the sense of smell, that we distinguish by it the fragrance of a rose, but not equally any other fragrance as powerful. We may not be capable, indeed, of saying of some odours, that they are the fragrance of particular flowers, or of determining of some sounds, by what instruments they have been produced. But the reason of this difficulty is, that the external forms of flowers

and instruments are not the direct objects of the senses of hearing and smell, which are affected only by the vibratory particles, in the one case, and the odorous particles, in the other case; and which never, but for other senses, could have told us of any flowers or instruments whatever. By the aid of other senses, indeed, we are able often to determine, that many flowers have mingled their odours, and many instruments their concurring vibrations. But in the varieties of sound, whether simple or complex, and the varieties of fragrance, whether simple or complex, all which was original in the particular sensations must have been felt with equal acuteness, if of equal intensity; or rather is itself the only measure which we possess of such intensity of the corresponding qualities of things without. There is no indistinctness in the immediate sensation: it is only in what is secondary or acquired in the perception, that any indistinctness is felt.

Now, if, on the supposition that magnitude and figure are direct objects of touch, this sense should give us perceptions as instant of every magnitude and figure, as hearing of every sound, and smell of every odour, let us consider, whe-

ther the phenomena agree, or do not agree, with this general description.

With this view, let an irregular figure, of any shape, and of the same temperature with the hand, to render the experiment as simple as possible, be pressed on the palm of any one whose eyes have previously been closed; and let him be required, in these circumstances, to state its magnitude and figure. It will be found, that he will form a very obscure and inaccurate guess as to its magnitude; and that he will very seldom, or, I may say never, be exactly right as to its outline. In no instance will he be able, even after the longest tactual study, if I may so term it, to state the magnitude and figure with the accuracy with which he is able to state them on a single glance; though the perception by vision is itself acknowledged not to be primary, but to be derived from the original perceptions of this very sense. In proportion as the figure is more regular, his perception will be quicker, and his approach to accuracy will be greater; though still far inferior to the rapid accuracy of that visual glance which is said to derive from it its whole power.

If we were to judge from the phenomena themselves, then, and determine the question by the evidence which they afford, it would surely seem to be stronger in support of the opinion, that the tactual perception of figure is secondary, not primary;—that we learn by touch to distinguish actual magnitude, as we learn visually to distinguish actual magnitude,—and that the simplest forms, therefore, being most familiar, are, as might have been anticipated, in such circumstances, most readily and surely learned.

IV. What the original sensations of touch have been, it may now, in consequence of the intimate associations that have been formed in the first years of life, be as difficult to discover, as to look on a landscape, and see only as much colour as is spread over the expansion of our optic nerves; though we have every reason to believe, that our primary perceptions of vision involved no greater amplitude of extension, if even they involved so much.

Yet, even at present, in the unfavourable circumstances in which every observation of this kind must be made, though it may be impossible

for us to determine accurately what the primary feelings of touch have been, we may yet, perhaps, be able to make an approach to this knowledge. It must be remembered, however, that, as our nice tactual measurements, when vision is excluded, are commonly made with portions of the fingers, these measurements which we ascribe to one simple organ of sense, are modified and greatly aided by our muscular feelings, in the limited resistance afforded to the contraction. It will be necessary, therefore, in our attempt to arrive at the original feelings of pure touch, to take portions of the tactual surface, either so small as to be seldom employed for the purpose of measurement, or so large as to admit of no sensible limits of the muscular parts resisted and unresisted.

When any very small body, then, such as the head of a pin, is gently pressed on the palm of the hand, while the eyes are closed, an affection of the tactual surface is of course produced, and a consequent sensation. This sensation is a sensation of touch, as much as any other sensation that is consequent on any other affection of any other part of the same organ: yet it certainly

would be very difficult, to discover in it any feeling of extension whatever, and I may say absolutely impossible, to derive from it any distinct notion of figure. In the case of an impressing body so small, however, this may not appear so surprising, as when a much larger surface is affected. Let the whole internal surface of the hand, then, be equally pressed on any uniform level surface, larger than itself, and of the same temperature, that the resulting sensation may be as little complex as possible. A feeling will arise, which is of a peculiar kind, indeed, but scarcely, if at all, involving any measure of extension, or at least so little like the feeling of extension which might be expected to arise, if touch were the primary sense of figure, that, if the fingers be kept separate, no distinction of the open spaces will be perceived. So completely, indeed, is this the case, that, if the pressure be continued with perfect uniformity, without any peculiar contraction of the muscles of particular fingers, it will be absolutely impossible to discover by this operation of mere touch, the number of the fingers that are extended over the surface compressed; which must have been instantly

distinguishable, if the figure of the corresponding external surface, broken as it must then have been by the intervals of the separated fingers, had been a primary and immediate object of the sense of touch.

With these facts before us, it would seem to me very unworthy of sound philosophy, to continue still to maintain, that Touch is the immediate sense of the varieties of figure, as Smell is the immediate sense of the varieties of fragrance: and the strength of the negative argument will continue the same, however inadequate any positive theory may be, that professes to account for the mode in which we obtain our primary knowledge of the external forms of things.

V. The inquiry into the source of this primary knowledge, if we enter on it at all, we must expect to be a very subtile and difficult one; since it involves the analysis of feelings which have been universally regarded as simple, and the elements of which must have been intimately combined, long before the period to which we are capable of looking back; and, for the same reason, we must be aware, that the results of an

analysis, which traces to a principle that has never been suspected to have any influence in the production of them, some of the most familiar feelings of our life, are not very likely to be of a kind that will appear very obvious, as first stated.

With these anticipations, let us enter on the inquiry.

1. In every attempt to arrive at the first elements of our sensations, we must begin by considering the circumstances in which the infant exists, on his entrance into life.

He has a mind susceptible of various feelings, —of all those feelings, which are afterwards developed, either by the action of external things, or by the tendencies of the mind to exist successively in certain states, as the consequence of certain other antecedent states.

He exists in a corporeal world, that contains innumerable objects capable of acting on his senses, and he has an organic frame, which is capable of being the medium of such action: but that organic frame is as little known to him as the system of external things, of which it may itself,

indeed, with reference to the mind, be considered a part; the hand being, in this sense, as much an external object, as the mass which it attempts to grasp.

It is necessary to have these circumstances clearly and constantly in view; since we should otherwise be in perpetual danger of supposing, that, because we, the observers, know that in touch an object of a certain form is pressing on an organ which is likewise of a certain form, the infant also must have this knowledge, and thus readily acquire the notions of extension, which such knowledge of itself implies. If he were to know that he has a hand, or any other organ of certain dimensions, he would already have the knowledge of which we are seeking the origin.

The infant does not know, then, that he has any organs, or that there is any other being than himself: but he is susceptible of many feelings, which may arise successively, and be remembered as past. He may look back on these feelings; and he may have all the notions which such a retrospect of a series of feelings involves.

2. There is one notion, in particular, which, as often as a series of feelings is reviewed, neces-

sarily accompanies every such retrospect. We cannot look back on the series, without considering it as of a certain *length*, greater or shorter, according to the number of the feelings remembered.

It is very falsely supposed, that when we speak of time as *long* or *short*, we use these words as metaphors only. They are used with a meaning as precise and real, as when we speak of the length or shortness of any line in geometry. In both they signify a greater or smaller number of portions of a series; and in both alike, therefore, there is a sort of progressive measurement; the portions of time, and the portions of space, which we call long or short, being always considered as a number of consecutive parts which we can conceive to be lengthened, or shortened, by the addition, or subtraction, of points of space or moments of time. It is only length of *time*, indeed, which is truly progressive; for length of *space* is all existent at the same moment; but, in estimating the one, as in estimating the other, there is a constant feeling of transition from part to part, which gives to the continuous points of space, in our measurements, a consecutiveness,

like that of the moments or proximate portions of the series of feelings, which constitute all that is known by us of time.

Length, then, whether of space or time, being the name only of a continued series, it is not wonderful, that, when both coexist as objects of our thought, the two series should often be confounded by the mind, and that the internal measurement of each, therefore, should be affected, and often greatly modified, by the internal measurement of the other.

Accordingly we find, that, in every measurement of space which is not regulated by a mechanical scale, the remembrance of the mental series of feelings enters largely as a constituent, or rather, I may say, in the greater number of such measurements, is itself the internal scale, according to which the estimate is made. The road along which we have been travelling slowly is, to our conception, far longer than the same extent of surface over which we have hurried rapidly: and, though we believe the reports of our milestones, because we take for granted that the spaces between them have been accurately measured, it is only by this faith in the mechanical

measurement, that we resist the impression of our own internal feelings, which would give us, in almost every case, a very different report.

The similarity of the notions of length or continued series of parts, in their different relations to space and time, appears very strongly from their tendency to flow into one another in such mixed internal measurements of distance. In the measurements of great spaces, however, it may be supposed, that the circumstances are too complex to admit of nicety of analysis; and that we are not entitled, therefore, to extend, from them, to the simpler measurements of touch, what may be true indeed of greater measurements, but true in consequence of circumstances which we may not be capable of tracing.

Let us take, then, a very simple case of measurement by touch; and let us trust to experience to decide, how far, in the simplest case, the notion of tactual length is influenced by the accompanying notion of time or succession of feelings.

Let any one, then, try the experiment with any surface that is familiar to him,—the desk, for example, at which he is in the habit of sit-

ting, or the book which he may have been reading. If he shut his eyes, and move his finger from one end of the desk to the other, or from one end of the volume to the other, at first with moderate velocity, afterwards with great rapidity, and afterwards with extreme slowness, he will find, in spite of all his previous exact knowledge of the form which he presses, his notion of the length of the surface to vary exactly with the time. I may venture with perfect confidence to assert, that, when he moves his finger with great slowness, he will believe that he is on the point of touching the extremity of the surface before half the necessary motion have been performed. The previous knowledge will be as little capable of correcting the illusion, while the slow motion is continued, as the previous knowledge of the exact distance of any object in a familiar scene can prevent us from regarding the object as nearer, or farther, when we look alternately through the different ends of a telescope. The time, in short, or in other words the length or shortness of the succession of feelings, in moving along the same surface, is as truly an element of the tactual measurement in such a case, as the varying sen-

sation that results from different distributions of the same quantity of light on the retina, is an element or constituent of the visual measurement.

Even at present, then, when our tactual knowledge of extension must, by long acquaintance with its varieties, and by the correcting influence of other senses, as far as these can be of any aid, be far more accurate than in infancy, the length or shortness of the series of our feelings, when all sensations but those which are commonly ascribed to touch are excluded, is found to be the chief constituent of our tactual measurements; and it is surely not less likely to have influenced us, before experience could have come in aid of our primary feelings, to correct their occasional irregularities and illusions.

3. Let us once more consider the circumstances in which the infant first exists, when he is the subject indeed of various feelings, but is ignorant of the existence of his own organic frame, and of every thing external. If we observe him as he lies on his little couch, there is nothing which strikes us more than his tendency to con-

tinual muscular motion, particularly of the parts which are afterwards his great organs of touch. There is scarcely a moment while he is awake, at which he is not opening or closing his little fingers, or moving his little arms in some direction. Now, though he does not know that he has a muscular frame, he is yet susceptible of all the feelings that attend muscular contraction in all its stages. From the moment at which his fingers begin to move towards the palm, to the moment at which they close on it, there is a regular series of feelings, which is renewed as unceasingly as the motion itself is renewed. The beginning of this series, as in every other regular sequence of events in after life, leads to the expectation of the parts which are to follow; and, like any other number of continuous parts, the whole series, whether merely remembered as past, or anticipated as future, is felt as of a certain length. The notion of a certain regular and limited length is thus acquired, and very soon becomes habitual to the mind of the infant;—so habitual to it, that the first feeling which attends the beginning contraction of the fingers,

suggests, of itself, a length that may be expected to follow.

It must be remembered, that it is the mere length of a sequence of feelings, attendant on muscular contraction, of which I speak, and not of any knowledge of muscular parts contracted. The infant does not know that he has fingers which move, even when, from an instinctive tendency, or other primary cause to which we are ignorant how to give a name, he sets them in motion: but, when they are thus in motion, and a consequent series of feelings already familiar to him has commenced, he knows the regular series of feelings that are instantly to follow.

In these circumstances, let us imagine some hard body to be placed on his little palm. The muscular contraction takes place, as before, to a certain extent, and with it a part of the accustomed series; but, from the resistance to the usual full contraction, there is a break in the anticipated series of feelings, the place of the remaining portion of which is supplied by a tactual feeling combined with a muscular feeling of another kind,—that feeling of resistance which has been already considered by us. As often as

the same body is placed again in the hand, the same portion of the series of feelings is interrupted by the same new complex feeling. It is as little wonderful, therefore, that this new feeling should suggest or become representative of the particular length of which it supplies the place, as that the reciprocal suggestion of one object by another should be the result of any other association as uniform. A smaller body interrupts proportionally a smaller part of the accustomed series,—a larger body a larger portion :—and, while the notion of a certain length of sequence interrupted varies thus exactly with the dimensions of the external object felt, it is not very wonderful, that the one should become representative of the other ; and that the particular muscular feeling of resistance, in combination with the tactual feeling, should be attended with notions of different lengths, exactly according to the difference of the length of which it uniformly supplies the place.

The only objection which I can conceive to be made to this theory,—if the circumstances be accurately stated, and if the inadequacy of touch as itself the direct sense of figure, have been suf-

ficiently shown,—is, that the length of a sequence of feelings is so completely distinct in character, as to be incapable of being blended with tactual notions of space. But this objection, as I flatter myself I have proved, arises from inattention, not to a few only of the phenomena of tactual measurement, but to all the phenomena: for in the measurement even of the most familiar object, as we have seen, a difference of the mere rapidity or slowness with which we pass our hand along its surface, and therefore of the mere length or shortness of the accompanying series of feelings, is sufficient to give in our estimate a corresponding difference of length or shortness to the surface which we touch. Length, indeed, considered abstractly, whether it be of time or of space, is nothing more in our conception than a number of continuous parts; and this definition is equally applicable to it, in the one case as in the other.

We see, then, how, in the mind of the infant, notions of length may be acquired, by the retrospect and anticipation of a continued series of feelings,—a portion of that long line of time, which seems to us, as often as we look to the past

and the future, to connect one remote event with another, like the lines of which geometricians speak, that, without any substantial reality, connect point with point in imaginary space.

4. In the early half-instinctive contractions of the fingers, sometimes more, sometimes fewer, of these are brought down upon the palm; and though the complex feeling, which arises from the simultaneous contraction of the whole fingers, would be, relatively to the sentient mind, like one simple feeling, if the contraction of the whole were uniform, it ceases to be regarded as simple, when frequent repetitions of the partial contractions have shown the elements of which that complex whole was composed. This internal analysis may be supposed to be rude and indistinct at first; but it will gradually become less and less obscure, like every other analysis which we are able to make of the first complex sensations of our infancy.

When the analysis has been made to a certain degree,—and when the inward movement of each finger has been felt, in the series of the muscular sensations that attend its contraction, like a

particular length,—the similar movements of the others, when the whole fingers are bent, will be felt as a number of concurring lengths. The analysis on which this distributive belief depends, will be aided by the very circumstances to which we have traced the feeling of resistance, that is afterwards combined with that of length in the complex notion of matter: for, when any small mass is placed in the infant's hand, and when the ordinary contraction of all the fingers has begun, more or fewer of these will be impeded in their course, according to the breadth of the mass; and the series of muscular feelings of the unimpeded fingers will thus be more strongly distinguished from the other concurring series, of which the very different feeling of resistance has supplied the place.

Even in that rude state of intellectual being, which we are considering at present, we must not suppose, that the mind is incapable of reasoning, or is exempt from the influence of those principles of intuition which it obeys in after life. Let us endeavour, then, to trace that mixed result of sensation and intuition and reasoning, which

may be supposed to arise in the circumstances that have now been under our review.

5. In whatever manner the first motions of the fingers may be produced, the infant will soon discover, that they are renewable by his will; and he will often exercise this power. From the accustomed antecedents he will expect the accustomed consequents, exactly as in after life; since this anticipation, which is independent of all reasoning, seems to flow from a law of our physical being. Certain series of feelings, then, begin and end in uniform order; the anticipation of which is fulfilled as often as he does not will to suspend them. At last, however, they are suspended, without any will on his part, when some external substance has been placed in his hand. He expected the whole of the accustomed series: but the place of a portion of it is now supplied by another feeling; and since all of which he was conscious in himself at the moment preceding the interruption, was exactly the same as in the many former instances when the regular sequence took place, he ascribes the feeling of resistance to something that is foreign to

him. There is something, then, which is not himself,—something that represents a number of concurring lengths,—something that gives rise to the feeling of resistance; and we have thus, however obscure they may be as first conceived by him, the rude elements, which afterwards become more distinct in his notion of a system of external things. Matter is that which is without us,—which has parts,—which resists our effort to compress it.

6. The notion of concurring lengths external to us, which I have traced only to contractions of the fingers, might be traced in like manner to other muscular contractions, especially to those of the arms, as sometimes terminating in certain tactual feelings, and sometimes interrupted by external objects: and the concurrence of these varieties of muscular contraction of the fingers and arms, and also of the impediments to accustomed series of feelings, when the contraction is interrupted, may be naturally supposed to aid the process, by which each singly might have evolved the same notions with less distinctness.

7. Another element of the complex feeling arises from the continuity of the surface of the tactual organ. I do not suppose this surface to be primarily known to the infant; for he would then have the knowledge which we are endeavouring to trace to its source: but, though he has no knowledge of his own organs, either as continuous in surface or separate, he has certain tactual feelings, which are not the same from similar pressure on different parts of the organ, but vary to a certain extent with the part of the organ affected; and of these some are always proximate to each other in time, when the hand is made to pass along any external surface. This proximity in succession of certain tactual feelings, when the same motion of the hand along similar surfaces has been very frequently repeated, gives another series for affording the notion of length, and a series that is equally capable of being anticipated and expected, as the muscular feelings in contraction. When one finger bends upon the palm, the series of muscular feelings terminates in a certain tactual feeling; when two or more fingers bend on it, they impress other portions of the tactual surface; the feelings consequent on which impressions have be-

fore been found to be continuous or proximate, in the manner already stated, when part after part of the surface of the hand had frequently been moved along the same surface: and the union of all these concurring lengths, if I may so term them, in the feeling of external resistance, in which they all terminate, when any mass within the hand supplies the place of the accustomed contraction, seems to afford the elements, from which that compound notion of outness, and extension and resistance, which are truly all that is meant by us when we speak of matter, may gradually be evolved. That the first notions of this kind will be very rude, may naturally be supposed;—as we cannot but suppose, in like manner, that the first visual perceptions of distance and magnitude are very rude. But the child will learn to distinguish forms by touch, as he learns to distinguish them by vision; and the elements of the perceptions, that are afterwards to become more and more distinct in progressive evolution, are all which the physiologist has to find, in the one case, as much as in the other.

It is not, then, to any peculiar intuition, that I am inclined to ascribe our knowledge of external things, as if the knowledge were primary and

immediate. I suppose it, on the contrary, to be progressive in touch, as it is allowed to be in vision; and I conceive, that the gradual acquirement of this knowledge implies only such associations, inferences, and intuitions, as are common to all our physical reasonings. There is an intuitive belief of uniformity of the order which has once been observed. There is a consequent expectation, when all the antecedent circumstances have been the same, in a part of an accustomed series of muscular feelings, that the remaining part of the series will follow. There is an inference, therefore, when, without any difference of previous consciousness, the accustomed series is broken, by a new complex feeling which arises on the interposition of some hard substance, that the cause of this change is something different from the little sentient being himself:—and there are the ordinary influences of association or suggestion, by which the complex feeling of touch and of resistance that is thus supposed to arise from a cause external or foreign, and that uniformly supplies the place of a certain length, or number of concurring lengths, becomes itself blended with the notion of those lengths of which

it is the uniform representative. Outness, Extension, Resistance, are thus mingled in one complex feeling; and these, in our conception, are Matter.

VI. In whatever manner the belief of external corporeal causes of our sensations may arise, the universality of the belief, as far back as we are able to trace our perceptions, is a physical fact, as true of the sceptic himself as of all the rest of mankind. In our reasoning hours, we may speculate on it variously: but in the moment of perception, it is equally impossible for us not to believe that there are external things around us, as to believe that we are ourselves unexisting.

1. That this impossibility does not arise from any primary intuition which accompanies our first sensations, but is the gradual result of other general influences, I have endeavoured to shew. The argument, however, in this respect, is of no consequence as to the justness of the belief; for the evidence, if that word may be used in such a case, is precisely of the same kind, whether the

intuition be primary and peculiar to our sensations, or common to them with other feelings, and will be neither of greater nor of less force, whether other principles of the mind do or do not concur with the simple intuition. Though our first sensations, of whatever kind, may have been regarded by us, as I conceive they truly were regarded, only as feelings that began and died away; and though, for many weeks, the notions of external causes of our sensations may have been as vague and indistinct as I conceive them to have been, a short time is sufficient to evolve them gradually into greater clearness: and we are believers in external nature, long before we are capable of thinking whether the existence of that world which appears to be around us wherever we are, be a question for philosophic inquiry. Our belief becomes at last, on the one supposition, what it is asserted to have been on the other supposition, in the first sensations of our infancy. The intuition, which in the one case is primary, is secondary in the other case, and combined with the influence of other principles of our nature: but, in both cases, the belief depends on intuition in one stage or other; and in both

alike, if it were possible for us to abandon our faith in every seeming truth that is not demonstrable by reasoning, the belief of a system of external causes of our sensations would cease with that abandonment.

This faith, however, it is by the very nature of intuition, or, as I should rather say, by the very nature of the human mind, impossible for us to abandon. The most sceptical inquirer is a sceptic only in years in which it is absolutely impossible for him to reject mentally what he professes to regard as illusive; or at least, in asserting that his feelings are under the influence of illusion, he must also admit, that it is an illusion to which he is at the very moment forced by his nature to yield, while he strives, in all the forms of reasoning, to appear to have escaped from it. In arguing against the reality of external things, he takes for granted that he has a disputant in the world without, on whose senses of sight or hearing he is to operate; and he avails himself instrumentally of substances which he regards as corporeal, at the very moment of his using them to prove that there is nothing which is worthy of that name.

2. It is not in the writings of BERKELEY, as I conceive, that any just view of the sceptical argument on this subject is to be found. On many other subjects, the acuteness of this amiable and excellent philosopher cannot be too highly praised: but the praise which he has received even from his antagonists, for the ingenuity of his reasonings against the existence of matter, seems to me to have been far greater than was merited. These reasonings are truly little more than the developement of one or two errors as to the nature of the mind and its affections;—errors, that were nearly allied, indeed, to opinions which had prevailed for many ages, but that were little in the spirit of the sound general views which had been introduced in intellectual science by the eminent philosophers who more recently preceded him. His errors, I have said, were primarily and fundamentally errors as to the mind itself: for it is in his false views of it, that all which is fallacious in his view of matter is to be found. Even in rejecting a fixed material universe, and asserting the reality only of minds and their ideas, he carried into mind and confounded with it the properties of the universe which he

had rejected; and, in this mixture of their common qualities, was almost as much a materialist as a spiritualist. He denies the existence of matter, in the common sense of that term: but he denies it, only by ascribing to the mind qualities, that are inconsistent with our very notions of spiritual being, and that, if really possessed by it, would bring it within a very near approach of that grosser substance to which it is commonly opposed.

Ideas, according to him, are not states of the mind: they are separate things, capable indeed of existing in a mind only, but contained within the mind, and capable of passing in some undescribed way from one mind into another. It is by ascribing recipiency, in this real unmetaphorical sense, to the mind, and a separate existence to the ideas of which it is the recipient, that he appears to me to have subjected himself to the charge of the semi-materialism which I have ventured to impute to him. He does not truly spiritualize the objects of perception, by making them thus fugitive; since, whether brief or lasting, whether termed Matter or termed Ideas, they are still said to be things capable of being contained within something else:—he only converts the mind it-

self into a spacious vessel for containing them. Recipiency, in this gross sense of holding things that enter it and remain in it for a while, is as incompatible with our notion of mind, as concavity; with which, indeed, it may be said, in this sense, to be synonymous. The spiritual nature, of which BERKELEY speaks, containing within itself an unbounded number of the things which he terms Ideas, that quit one mind to find their way into another mind, has scarcely any greater claim to be regarded as the pure Intelligence of which we are accustomed to think in using that phrase, than the mass of the brain to which materialists ascribe a similar office.

3. The only philosophic scepticism with respect to an external world, is that which, rejecting the separate existence of ideas, regards them in their true light, as states of the mind itself, and nothing more. Our perceptions, it may be said, are mere states of the mind, as much as any of our other vivid feelings,—a part of the series of states in which the mind has existed, from its first sensation in infancy to the present moment. What we call our knowledge of matter, is either this mental state, which we term

Perception, or an inference from this mental state, that must be itself equally a modification of the mind. If consciousness had not been, knowledge could not have been; and, beyond the mind itself, there is no consciousness; for consciousness, whatever variety of names we may give it, in sensation, in thought, in emotion, is itself in all these, only a state in which the mind is existing at the moment. All of which we are conscious, therefore, when we have a notion of external things, and give to that notion the name of Perception, is a feeling of the mind itself; and though it proves certainly, that the mind is capable of existing in this as in other states, it is that mental capacity alone which it proves.

4. To this scepticism, as to a world of masses that have qualities corresponding with our perceptions, there is no evidence of mere reasoning which can be opposed, except that which is founded on our actual impossibility of disbelieving the existence of such masses. The feeling, to which we give the name of the Perception of a Rose, is indeed a state of the mind, and of the mind only: but this very state of the mind, which

arises in certain circumstances, independently of any volition on our part, is a state of belief of the existence of something distinct from ourselves, and corporeal, to which we give the name of a Rose. To perceive is to make this very reference, and to make it undoubtingly. The state of the mind does not lead to the belief, but is the belief; and therefore, while the mind continues to be impressed with this and similar feelings, that are as much beyond the controul of our reason as of our will, it must, by the very nature of the feelings, be a believer in the outward things which its perceptions seem to point out to it.

This is what we feel in perception, and must always feel, till, by some change of our physical nature, perception cease to be a state of the mind. Beyond the irresistible faith that is involved in the feeling, there is indeed nothing, it may be allowed, on which a reasoner can found his demonstration: but faith so universal, and so irresistible, has in it all the force of demonstration itself; because it has all the qualities of those primary truths which demonstration itself only evolves more fully in unsuspected applications of them, but does not render of stronger evidence,

than they were felt to possess before the demonstration began.

VII. It is only in this way, as it appears to me, that the sceptical argument as to the existence of Matter admits of being answered: and the answer and the scepticism, it is evident, are alike independent of any false notions which may be entertained, with respect to the nature of Ideas; since both proceed equally on the belief that ideas are mere affections or states of the mind. There is one philosopher, however, of very high celebrity, especially in the northern part of the Island, who has been generally considered as the establisher of the positive doctrine of the existence of a system of material things, by his overthrow of what has been termed the Ideal Theory of Perception. The philosopher of whom I speak is Dr Reid, who regarded this supposed discovery of the errors of a former system as the source of almost every thing which can be considered as original in his own views of the mental phenomena, and who, whatever we may think of the general rank which he should hold as an intellectual inquirer, or of the justness of this par-

ticular pretension, must be allowed at least to have had a mind far too candid and honourable to lay claim to any praise to which he did not believe himself to be justly entitled.

The ready admission which his claim has received; the ample praise which has been in consequence bestowed on him; and the eminence of that School of Philosophy which was in a great degree founded on the opinions entertained by him on this leading subject; render necessary some examination of the grounds, on which so much merit has in this respect been ascribed to him.

We may consider, then, in the *first* place, the opinions entertained by Dr Reid himself with respect to perception;—in the *second* place, the justness of the title which these opinions have been supposed to give him, to be regarded as the overthrower of that very absurd theory of perception which has been distinguished by the name of the Ideal System;—and, in the *third* place, the effect which this supposed overthrow, if real, would have had, or might justly be expected to have, in obviating or lessening the force of the scepticism as to an external world.

1. According to Dr Reid, there are, in the process by which we become acquainted with external things, two distinguishable "acts of the mind,"—in the *first* place, Sensation, by which various feelings are excited in the mind, simply as feelings,—fragrance, sweetnesss, sound, for example; and, in the *second* place, Perception, which accompanies these sensations, and refers them to objects existing without,—a particular fragrance, for example, to a quality of the rose which we smell, a particular sweetness to a quality of the honey which we taste, a particular sound to a quality of the trumpet which we hear. The trumpet, the honey, the rose, in all their variety of qualities, might be for ever unknown to us, if we were capable of sensation only: for sensation does not go beyond the feeling itself, which those objects excite. It is Perception, which, passing from the internal momentary feeling to the world without, discovers there some object to which it refers the feeling as its effect. There is, in short, according to him, a peculiar Power of the Mind, by the operation of which we have an immediate conviction of qualities of external things, that excite our sensations:

—and this Power, which is in every instance distinct from Sensation itself, is Perception.

If nothing more were meant by this distinction of Sensation and Perception, than that certain feelings, induced by external things, may, or may not, be considered by us with reference to their external causes, and that the word Perception is used to express the complex state of mind, when such a reference is made; the word might be allowed to be a very convenient one: but, when it is intended to convey the belief of a peculiar Faculty of the mind, under the name of Perception, that is distinct from Sensation, though commensurable with it in all the variety of the feelings which are recognised as the results of external influences, and that is at the same time essentially different from every other Power or tendency of the mind, the assertion of such a Faculty cannot be admitted; because it is founded on a very imperfect analysis of the phenomena, which a more minute examination would shew to be referable to other sources.

What we term Perception is, in the greater number of cases, if not in all, a suggestion of memory, and nothing more. I have already

shewn, that, if we had had no other sense than smell, no other sense than taste, no other sense than hearing, and I might add, no other sense than that of colour, we should as little have suspected the existence of an external cause of our sensations, as of a direct external cause of any of our internal emotions. When we have previously acquired, whether by touch, as is commonly supposed, or less directly, in the manner which I have endeavoured to point out, the notion of external form and resistance, we have then, indeed, the complex notion, which we term the Notion of Matter; and this notion is capable of being suggested in certain trains of thought, as much as any other feeling of the mind. When we have previously seen and handled a rose, then, at the same time that we were sensible of its fragrance, or listened to a flute, with the existence of which, as a hard figured body, we had previously become acquainted, it is not very wonderful, that, on hearing the flute again, or again smelling the rose, we should be reminded of those external forms, with the presence of which the sound and the fragrance had before seemed to be connected in intimate union. The supposed per-

ception, in these cases, is obviously nothing more than a simple suggestion of Memory or Association, or such an inference as is made in any of the simplest ordinary cases of reasoning. It is only in the phenomena ascribed to Touch, that any thing like the peculiar perception, of which Dr REID speaks, is to be found: and even in the supposed perceptions of Touch, as I have endeavoured to shew, a finer analysis may detect elements still more minute, that do not render it necessary to refer them to a peculiar Faculty. But, though we should admit the phenomena of perception in touch to be what he states them to be, it is in this one order of our sensations alone, as I have said, that the distinct perception takes place; and in all the other orders of our sensations, what is termed Perception is the mere suggestion of the form and hardness, which the single sense of Touch is supposed to have made known to us intuitively. Why this particular intuition, if it is to be considered as one, should be ranked differently from other intuitions, under the name of a Power or Faculty, it is not easy to discover. When we believe in our own identity, or believe that the future course of nature will re-

semble the past, the belief is not ascribed to the operation of a peculiar Intellectual Power; and yet these intuitions would as justly deserve the name of a Faculty, as the intuition which alone we suppose to impress us with the belief, that our sensations of touch have an external cause which is hard and figured.

All the phenomena of the mind, by whatever names expressed, are, as I have already often repeated, nothing more than the mind existing in certain states, and exhibiting, therefore, certain susceptibilities of it, or tendencies to exist in these successive states, after certain other antecedent circumstances, external or internal. What Dr Reid terms *Acts* or *Operations* of the mind, are nothing more than the developement of these tendencies, when the antecedent circumstances necessary for their developement have taken place. The "act" of Sensation, and the "act" of Perception, express, indeed, different states of the mind; for the one expresses a simple feeling, the other a reference of this feeling to some external cause, suggested by former association, or perhaps in one order of our sensations discovered intuitively: but, however different they may be,

they are still, like all our different feelings, a portion of the series of states in which the mind has existed at different times, that have been various, as the antecedent circumstances which induced them, have themselves been various.

Dr Reid, however, considering all the processes of thought in a more mysterious view, and attaching to the words *act* and *operation* no very precise meaning, was influenced by an error of the same kind, in supposing the word *object* to express a relation different from that relation of simple and invariable antecedence, which is all that is meant when we speak of causation, in other sequences of events, material or mental. Yet perception is surely a mere feeling or state of the mind, like any other part of our varied consciousness,—a state of mind, which is induced, directly or indirectly, by its external cause, as any other feeling is induced by its particular antecedent. If the external cause or object be absent, the consequent feeling, direct or indirect, which we term Perception, will not be induced; precisely as any other feeling will not arise without its peculiar antecedent. The relation of Cause and Effect, in short, is exactly the

same in perception as in all the other mental phenomena,—a relation of invariable sequence of one change after another change. I have already shewn, that in all our affections of sense, with the exception, perhaps, of the single order of them commonly ascribed to Touch, perception is nothing more than a suggestion of the past; and that what we term the Object, therefore, in these cases, is merely what we remember to have been present on some former occasion: while in Touch itself, the belief or perception of something hard and figured, if it be not, as I suppose, the result of similar associations and inferences, is merely an intuition like any other intuition, in which we do not suppose the relation of the intuitive feeling to the feeling that preceded it, to be at all different from the relation of any other feeling to any other antecedent feeling. When certain circumstances have taken place, certain sensations arise; when certain other circumstances have taken place, there is a sequence as immediate of certain intuitions. The consequent feelings in the two cases are different as the antecedent circumstances are different; but there is no difference in the nature of the relation itself which

the particular consequent in the train bears to the particular antecedent.

2. The mysterious obscurity of the meaning attached by Dr REID to the relation of the object of perception to the percipient mind, as different from that of the ordinary sequences of events in causation, tended greatly, as I conceive, to aid the illusion with which he flattered himself that he was the overthrower of a great system of error, in his exposure of the absurdity of the Ideal System of Perception. That such a claim should have been made by him is indeed wonderful: but far more wonderful is it, that the claim should have been admitted, and should still continue to be admitted, by the general assent of philosophers.

The narrow limits of a sketch like the present, which must necessarily be restricted to a brief view of the phenomena themselves in their various relations, or to a notice only of such theories as derive peculiar importance from the high estimation in which they continue still to be held, do not allow room for a full discussion of the circumstances which seem most probably to have

led to that ancient theory of perception by intervening species or images of things, the spirit of which, in its most important applications, Dr Reid conceived himself to be the first who had effectively combated. I may state, however, in general, that this, like various other theories, ancient and modern, of the same mental process, seems to me to have arisen chiefly from a false supposition of two great difficulties,—the difficulty of accounting for the perception of objects at a distance, and the difficulty also of accounting, with respect to substances so little kindred in their nature as matter and mind, for such a link of mutual connexion, as was supposed to be necessary for their reciprocal agencies in causation. Of these two imaginary difficulties, which have been so perplexing to philosophers, and so productive of wild and extravagant fancies, one vanishes instantly, when it is shewn, by an analysis of what is falsely called the medium when it is truly the direct object of the particular sense, that there never is, in the strict philosophic meaning of the phrase, perception of distant things; and the other difficulty vanishes in like manner, when it is shewn that causation does not imply

any intermediate link of connection, but is the simple relation of one change, as invariably antecedent, to another change that is invariably consequent. The views, therefore, on which the Ideal theory was founded, were false: but, while such false views of perception at a distance, and of the necessity of connecting links in causation prevailed, the doctrine of Species was a very natural consequence of them; since, however faulty in other respects, it had at least the advantage of appearing to obviate the two great difficulties which perception was thus erroneously believed to involve. By flowing from the object to the organ, and affecting the organ only when in contact with it, the Species virtually destroyed the interval between external things and our sensitive frame, and at the same time, from its exquisite tenuity, as of a nature almost intermediate between that of matter and of mind, seemed admirably adapted for such a common link as was supposed to be necessary to intervene and connect them.

While the difficulties which I have now stated were felt, then, it does not appear to me wonderful, that a doctrine like that of perception by Spe-

cies should have prevailed; since the facility which it afforded of obviating these difficulties would naturally, as we may well suppose, procure an indulgent allowance for the imperfections which it involved in other respects. If the belief of such little images, as the real objects of perception, had prevailed down to the time of Dr REID, he would have been most unquestionably a benefactor to science, in exposing the futility of the hypothesis. But though, during the reign of the Commentators on ARISTOTLE, this error may be said to have been universal in the Schools, it had gradually sunk away, chiefly by the influence of the Cartesian philosophy *, in which the

* I refer particularly to the paragraphs 197. and 198. of the 4th Part of the PRINCIPIA PHILOSOPHIÆ, and to the 1st and 4th Chapters of the DIOPTRICS. I have far too high a respect for Dr REID, to suppose for a moment that he could be guilty of wilful misrepresentation. But my astonishment is the greater on that account, when, after reading these and similar passages, in disproof of perception by representative images, I find that he who contends that there is no proof of such representation, "Diversos motus tenuium uniuscujusque nervi capillamentorum sufficere ad diversos sensus producendum,"—" neque opus esse ut in objectis aliquid sit nostris sensibus simile," is yet stated to have believed " that it is only a representative image, in the mind, of the external object that we perceive, and not the object itself; and this image, which the Peripate-

absurdity of the supposition of such intermediate images was very strongly shewn. From the period of this memorable reform in science,—if we except MALEBRANCHE, who, though a Cartesian in many important respects, had not adopted his great master's simple theory of perception, and BERKELEY, who, as we have seen, had notions on this subject, which in many respects were not very unlike to those of MALEBRANCHE, —I do not know any great writer, who professed a belief of the necessity of images as things intervening in perception, or who considered the idea as something altogether distinct both from the mind and from the external object. They were accustomed indeed to speak of ideas in their minds, as we are accustomed still to use the same phrase; but they meant nothing more by it then, than we mean by it now, and could as little have suspected, that the use of such a metaphor would,

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tics called a Species, he calls an Idea, *changing the name only, while he admits the thing.*" The change of mere name would, indeed, have been of little consequence; but it seems scarcely possible to read the works of DESCARTES, without perceiving, that his controversy with the Peripatetics, in this respect, regarded the thing, and not the name.

at the interval of a century, subject them to the ridicule of philosophers, for believing in the existence of real images of things which were neither the external objects perceived nor states of the percipient mind, as we should now dread a similar confutation and ridicule from the philosophers who are to follow us, for a similar use of the same very obvious figure of speech.

The presence of an external object,—an organic change, or series of changes of some sort, consequent on the presence of that object,—the subsequent affection of the sentient mind itself,—all these Dr REID supposes to be necessary to constitute the process of perception, and contends only against the existence of "a fourth thing," which, under the name of an Idea, he affirms to have been introduced by philosophers: but the existence of this fourth thing, distinct from the object, from the organic change or series of changes, and from the mind itself, was as little maintained by DESCARTES, by HOBBES, by LOCKE, or, with the exceptions already made, by any other intervening philosopher of the slightest eminence, from the time of DESCARTES, as it was maintained by Dr REID himself. The materialists

indeed might reject the mental affection, which is the last part of the process, as the rejecters of matter would of course deny the presence of the external object and the consequent organic changes which form the first and second parts of the threefold process; but the *fourth thing*, distinct from the object the organ and the mind, was not supposed by any one.

How erroneous a representation Dr REID has delivered of the opinions on perception entertained by the great philosophers preceding him, can be shewn, however, only by a full review of the works themselves, in which their opinions are stated. After such an examination, the general sanction which his claim has received, will appear indeed most extraordinary:—but it is a review which cannot be comprised in a few pages, and which is too extensive, therefore, to be attempted in this brief sketch.

I have already said, that the vague and mysterious meaning of the word "object," which, in the speculations of Dr REID, is a word of peculiar importance, tended partly to aid his illusion in this respect. In the process of perception, there is always a series of changes, corporeal and

mental. If we were to analyse the process with strict philosophic exactness, and to ascribe each effect in the train only to its immediate cause,—as we should in that case consider the mental affection with constant reference to the sensorial change, and only to the sensorial change, by which it was immediately induced,—its real object or external cause would appear to be that particular state of the nerves and brain. But we are not always so exact in our analysis and reference. It is much more convenient, for the sake of brevity, in popular and even in philosophic language, to omit many parts of the train of corporeal changes, and to speak only of the perception itself, and of the object that is external not merely to the mind but to our bodily frame; since, on the presence of this external object, the whole bodily train of changes, however numerous and various they may be, are a sequence which may always be anticipated. This separation of the object from the train of bodily changes that follow it, as if it had itself a relation to our feelings that is primary and direct, and the peculiar importance attached to its presence as that on which the other changes of the train de-

pend, lead very naturally all who are little accustomed to nicety of analysis, to suppose the relation of the Object in perception, to be one of a peculiar kind, different from the relation which the other parts of the train bear to each other. With this view, therefore, of something peculiarly mysterious in the relation, it is not wonderful that they should imagine, when philosophers do not speak of it as of a peculiar kind, but content themselves with merely tracing the parts of the sequence of changes in the process of perception, of which the presence of the external object is a part like any of the other parts, that they who do not apply to the external object any of the accustomed phrases of mystery, must have in view something else, an image or other intermediate thing, which they regard as the real object of perception,—its object not in the sense of mere antecedence or causation, but in that mysterious sense in which the more distant object has been falsely understood by themselves.

The fallacy in this respect would naturally be much strengthened by the use, in a metaphorical sense, of phrases that, while the Scholastic Philosophy prevailed, were employed with a very

different meaning. To perceive ideas was, in the scholastic ages, to have "images of things," distinct from the object and the mind, truly present to the mind in perception; and though this and other similar phrases of the obsolete philosophy, like the language which we use when we speak of the rising and setting of the sun, to express only corrresponding motions of our earth with respect to that great luminary, were employed to express opinions on perception corresponding exactly or almost exactly with those of Dr Reid himself, it still was *possible* to conceive them as meant to be expressive of the ancient opinions which they had long been employed to denote. In this way only can we account for the singular illusion, which, in spite of the contrary assertions in the works of the eminent philosophers who preceded him, and even of the ordinary language * of the elementary works of the schools,

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* I may quote, as an example of this kind, the words of one of the most laborious and useful of elementary writers on Logic, J. P. De Crousaz, Professor of Philosophy and Mathematics at Lausanne, who is, perhaps, now better known to general readers by the line in whieh Pope has coupled him with 'Dutch Burgersdyck,' than by his many Works on Dialectics, which might justly have entitled him to more honourable no-

could lead the author of the "Inquiry into the Human Mind" to suppose, that in the systems of all the great metaphysicians who spread a light of so much glory on the century preceding him, it was assumed, that we saw and heard and smelled and touched and tasted only little images of things, distinct both from the mind itself and from the external things which surround us.

It was, perhaps, unfortunate for the accuracy of Dr REID's Philosophy, that his view, as a controversialist, was so frequently turned to the speculations of Mr HUME; who, though worthy of high praise for his acuteness, is far from being entitled to the same praise for the precision of his metaphysical language; and who, perhaps, occasionally, for the sake of giving greater force to his sceptical reasonings, which a little verbal

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tice. "Cogitandi modi qui in nobis sunt," he says, "quibus cogitatio nostra modificatur, quos induit alios post alios, sufficiunt ut per eos ad rerum cognitionem veniat, *nec sunt fingendæ ideæ ab illis modificationibus diversæ*." It would not be easy to express more strongly the nullity of those intermediate Ideas of which Dr REID supposed himself the overthrower: and indeed, if I were desirous of giving a view of all which Dr REID supposed to be peculiar to himself in his system of Perception, I could scarcely do it better than in the words of DE CROUSAZ.

confusion might render more difficult to be combated, was less nice in his analyses, and in the applications of his terms, than he would otherwise have been. A particular study of his language, therefore, which was often accordant with that of the scepticism of earlier ages, was very apt to mislead an inquirer, who did not make the necessary limitations and deductions on that account. In his Essay on the Academical Philosophy, in which he states the sceptical argument against the evidence of the senses, he uses phrases, indeed, which, if we were to consider them technically, without attention to the spirit of the argument, might be adduced as proofs of his belief of images present to the mind. But it is very clear, that the image of which he speaks in such a case, is the perception itself, not any thing distinct from perception; and that the presence to the mind is only a metaphorical expression of the actuality of the momentary feeling. He calls it, therefore, an "Image or Perception;" and he says, that "the existences which we consider, when we say *this house*, and *that tree*, are nothing but perceptions in the mind;" thus evidently shewing that he does not mean the image

and the perception to be distinguished. Dr REID, however, who had been originally, by his own account, a believer in real images of things, was the more naturally led to conceive his own error to be the common belief of other philosophers, and, in conformity with this opinion, therefore, to interpret strictly in every case the phrases that were used by them with a metaphorical or limited application. His self-illusion as to his supposed overthrow of the Ideal System was thus, perhaps, the consequence of his own former belief of that very Ideal System.

3. But, even though it were granted, in accordance with the too ready general admission of this claim, that Dr REID was truly the overthrower of that strange system, which he affirmed to be the universal belief of philosophers, would this overthrow deserve to be considered as having any effect in lessening the scepticism with respect to an external world? In this respect, too, a species of merit has been ascribed to Dr REID's System, which it certainly is very far from deserving.

Our perceptions,—or whatever other name we may give to our belief of external things as causes of our sensations,—are, it must surely be allowed, states of the mind, not states of matter; and would be equally so, whether induced by things which are to be termed Ideas, or by things which are to be termed more properly Objects of Perception. If all that is mental had continued precisely what it has been in any of the individuals who live around us, and if every thing material could be supposed at the same time to have had no existence, there would still have been, as now, what we term Perceptions of external things; because perceptions are a part of the series of states of the mind. It would be of no moment in this respect, whether in the annihilation of every external object were included certain things called Ideas, or whether there never existed such things; for, as the mental state of perception, in whatever way induced, must still be only a state of the mind, the relation of this state to its immediate external cause is all that could be affected by the annihilation, and this relation to an external cause, would be the same, whether the direct antecedent were the presence

of an object external or an image external. The image would be only one external link more,—an unnecessary one, it may be admitted, in the train of antecedents of perception; and the argument of the sceptic regards not the number of antecedents of perception external to the mind, but the existence of any external antecedent whatever. It is in the mental nature of the feeling which we term Perception, that the whole force of the argument consists; and that nature is not rendered less completely mental by the denial of intervening Species. On the contrary, it seems to me that the admission of such species, as it would itself be the admission of *something* external to the mind, would lessen, rather than increase, the force of the sceptical argument, which proceeds on the impossibility of any knowledge but of the various feelings of the mind itself. The only scepticism on the subject that is worthy of being confuted, is that which believes as little in things called Ideas, beyond the mind, as it believes in any thing else beyond the mind, and has, therefore, nothing to do with the controversy, whether the feeling which we term a Perception of the sun have for its cause the light

which is radiated from that great orb, or the presence of some intervening thing, which is a little image of the sun. To shew that there is no such little image, would be of no effect whatever in combating such scepticism: for there would still be the same necessity as before, to shew that the cause of the feeling, though not an image, was a mass such as we term the Sun, or an ethereal substance like that to which we give the name of Light. This Dr REID can do in no other way, than by stating the absolute impossibility of disbelieving the existence of external causes of our sensations, —an impossibility that would be exactly the same, whether little images of things existed or not; and this impossibility of disbelieving, in perception, that there are things truly without us, the sceptics whose reasonings he supposed himself to have overthrown, would have admitted as readily as himself; though they might still have endeavoured to shew that this very impossibility was the result of an illusion. Nothing can be stronger, as to the total inadequacy of the sceptical argument to produce any practical and lasting conviction, than the language of Mr HUME himself. "Nature," he says, "is always too strong for

principle: and though a Pyrrhonian may throw himself or others into a momentary amazement and confusion by his profound reasonings, the first and most trivial event in life will put to flight all his doubts and scruples, and leave him the same, in every point of action and speculation, with the philosophers of every other Sect, or with those who never concerned themselves in any philosophical researches. When he awakes from his dream, he will be the first to join in the laugh against himself."

It would not be easy to discover in the writings of Dr REID himself, a stronger expression of the irresistible evidence, as he would term it, of the Senses. Indeed, the philosophy of Mr HUME and the philosophy of Dr REID, on this subject, on which, to ordinary observers, they may seem to be wholly at variance, will appear, if we examine them more closely, to have no real discrepancy. The doctrine of both is composed only of two propositions; one of which is, That no argument can be offered to shew by mere reasoning the existence of external causes of our feelings,—The other, that it is absolutely impossible for us, in the various states of mind which

we term Perception, not to believe in external causes of our feelings. The whole seeming difference is merely this,—that each philosopher, though affirming both propositions, dwells a long time on one of them, and a short time on the other; and that the particular proposition on which they dwell the longer, is not, in both cases, the same.

CHAPTER VI.

OF VISION.

As our visual sensations, though, at the period in which we are capable of reviewing them, more complex than those of Smell, Taste and Hearing, are less so than the sensations commonly ascribed to Touch, I should have preferred to treat of them before the sensations last mentioned, if the analysis of these had not been requisite for understanding what is complex in the phenomena of Sight.

I. Light, in all its varieties of whiteness and colour, is the object, and the only real object, of this Sense,—that of which the presence within the ball of the eye is attended with a certain affection of the sensorial organ, and afterwards

with a corresponding affection of the sentient mind. It is only indirectly, therefore, as emitting or reflecting or modifying in some way the light which is afterwards to enter the eye, that other objects can be said to be objects of Vision.

Of the beautiful adaptation of different parts of the eye, for modifying the quantity and direction of the light received by it, it is not necessary for the physiologist of mind to speak. It is enough, for him, that certain sensations are the immediate consequents of certain affections of the organ; and even the last organic affections themselves are objects of his science only from their relation to these consequent sensations.

All which we truly *see* is the light that is present at the Retina,—the expansive extremity of the optic nerve. But, since this light never can be greater in superficial expansion than the expanse of the Retina itself, and since it is only when it arrives there that light is visible, whether it have come from a distance of many miles, or from the object that is nearest to the eye; how happens it, that we are capable of discovering, by the medium of the small quantity of light that may be in contact with our organ of vision, the

magnitude, figure, and relative position of a distant object?

In the other animals, whose peculiar circumstances in other respects would render it impossible for them to preserve their life during the period necessary for acquiring such knowledge, this information has every appearance of being intuitive, or nearly so. They have, by the provident goodness of their Creator, this necessary instinct additional to many other necessary instincts, which have not been given to Man, whose early and long-continued weakness is in many other respects as unlike their early vigour, as the boundless intellectual attainments of his maturer years are unlike their limited and almost stationary knowledge.

In the human infant, however, no traces of such an instinct are discernible: and to him it is not necessary; because he is under the unceasing protection of parental love, that is able to guard him during the period in which he learns to convert the rude elements of vision into a sense that is afterwards to lay open to him the world of space. In this way, colour becomes to him a language like speech itself; and he learns to see forms and

distances, as he learns to read the arbitrary symbols which express them in verbal characters, that are nothing in themselves, but become a language by the meanings which have gradually been associated with them.

When an infant has acquired some knowledge of the extended and resisting objects without him, either immediately, as is commonly supposed, by touch, or by that slower process which I conceive to be necessary, it is a natural result of the general principle of Association or Suggestion, that the tactual and muscular feelings should seem to rise again in connection with any other feelings that may have co-existed with them. He grasps an object frequently, at the same time that he looks on it; and at the same time also he hears its name frequently pronounced. It is as little wonderful, that the visual sensation should recall the tactual and muscular feelings, as that these should recall the mere sound. It is by such frequent co-existence of sensations, that he learns the meaning of words; and precisely in the same way he learns the meaning, if I may so express it, of the visual characters before him.

II. When this process, by which our visual sensations become a language significant of things without, has been clearly understood, many supposed mysteries of vision cease to be mysteries. We see an object, for example, as *one*, when we look on it with a single eye, and we see it still as *one*, though we look on it with both eyes. But this single vision, from a double organic affection, has nothing wonderful in it, if we consider that the single and the double affections have been equally *associated*—to use the common phrase—with the tactual and muscular feeling of a single object, when that single object alone was grasped by us, and we gazed on it, usually with both eyes, sometimes perhaps with only one. The visual sensation in this case, suggests what co-existed with it before, and only what co-existed with it before. Accordingly we find, that, as often as a double organic affection is produced, different from that which takes place in the retina of each eye in ordinary vision, there is truly a perception of a double object. This is the case, when the common inclination of the axes of the eyes is prevented either by disease or by external force. There is then such an affec-

tion of parts of the retina, as could take place, in the ordinary circumstances of vision, only when two objects were present; and two objects, therefore, are suggested by the visual sensation.

In the same way are we to account for the erect position, in which objects appear to us, when their image on the retina is inverted. It would indeed be truly wonderful, if they were to appear differently; for it is not the image on the retina that appears to us without: it is that which was felt tactually, when similar visual sensations were before excited. The visual sensations, by frequent co-existence, have become representative of what was thus felt; and therefore, if they suggested an inverted object, they would not suggest the object of touch which had before co-existed with such sensations, but one of which the presence had before co-existed with a different sensation, when an object of the same shape, but inverted, was before grasped by us and seen.

The original sensations of vision, then, it appears, being capable of suggesting other feelings that have frequently co-existed with them,

may convey to us knowledge as various as the secondary feelings that have been associated with them. We have previously learned to distinguish magnitudes and figures, and to measure the space which divides one object from an object more remote; and, having acquired this knowledge, we have found our visual sensations to correspond in their varieties, with the varieties of magnitude and figure and position of external things, and learn, therefore, from the one to infer the presence of the other; till at length, by a union that is progressively closer and closer, the inference or suggestion seems itself, in its rapid and never-failing subsequence, a part of the visual sensation that has flowed into it, and mingled with it indissolubly.

III. The perception of the actual magnitude, figure and place of external things, is then a secondary, not a primary perception of vision. It is the result, in every instance, of knowledge formerly acquired, and it is modified in three ways, according as that previous knowledge may be suggested,—by the different affections of the optic nerves,—by certain muscular feelings,—and by

the place of other known objects which are seen at the same time.

1. The rays of light emitted or reflected from objects affect a part of the retina, that is larger or smaller in proportion to the angle subtended by the object, and affect it more vividly in proportion to the number of rays, which, if all other circumstances be the same, fall in larger number, and with a more definite boundary, according to the nearness of the object to the eye. In these ways, the differences of light produce a difference of organic affection, and a corresponding difference of visual sensation, whatever that simple feeling may originally be which becomes significant of the magnitude and form and distance that have usually been found in objects of touch, when a similar visual sensation has before been induced.

2. As the object on which we look is at a greater or less distance, different muscular movements are necessary for producing an equal direction of the eyes on the particular point of vision; and, faint as the muscular sensation may be, it still furnishes an element of the complex

sensation which suggests particular varieties of magnitude and place.

3. Our previous knowledge of the magnitude and form and place of certain objects, is a third element, and a very important one, in our visual measurements. It is only in this way, that an object, which we know well, appears of the same magnitude in situations in which it may be demonstrated optically, that its image on the retina must have been reduced to a tenth part or less of that which it produced when nearer; and in like manner, as might naturally be supposed, we distinguish more accurately the distance of an object in motion, that appears to us to be near to some other object which is fixed, and the situation of which we know.

In all these ways, the varieties of which are usually combined in the same complex estimate, it is easy to conceive how the visual perceptions that are termed Secondary or Acquired, may have had their origin. But what are the primary feelings of this sense? Do they comprehend only varieties of colour and whiteness, or do they include a perception of figure also?

IV. The distinction on which BERKELEY, in his Theory of Vision, has laid so great a stress, of *visible* and *tangible* figure, has been adopted universally by philosophers. They all suppose, with him, that the tangible magnitudes, which we seem to perceive visually in the objects without us, are not original objects of vision: but at the same time they believe, with him, that there is a smaller figure, co-extensive with the affected portion of the retina, and therefore with the corresponding expanse of light, the perception of which is a primary accompaniment of the sensation of colour; and they believe this, without thinking that any evidence is necessary, or at least without assigning any reason for their belief.

It is quite certain, that the only figure which we have any consciousness of perceiving, is the figure termed Tangible; and that as far, therefore, as consciousness is concerned, the assertion of the other sort of figure, as an original and immediate perception of vision, is the assertion of a visible figure which is never visible, or at least which no one can remember to have ever seen.

In opposing, then, what is merely asserted without evidence, it is impossible to refer to any

arguments in support of it, of which the validity may be examined. Yet we cannot suppose, that the belief could have continued to be thus universal, without some circumstances that must have appeared to justify it, and that have not been stated, perhaps, only because they may have seemed too obvious to require to be stated. It is not very difficult to conjecture, what these circumstances probably have been.

One probable cause of illusion in this respect is akin to an error which I pointed out in my analysis of the phenomena commonly ascribed to touch; in which great stress has been laid by philosophers on the similarity of the form of the compressed organ to that of the object compressing. There is truly, when we look at external things, a miniature image of them on the retina, —an image which, from our knowledge of the fabric of the eye, and of the laws that regulate the motion of light, might have been optically predicted, and which may be made distinctly visible, in a dissected eye, after separation of its posterior coats. The peculiar distinctness of the visual image, and the power of thus exhibiting it to others, give it an importance, in our concep-

tion of it, to which physiologically it is not entitled; and to those who do not consider the circumstances very minutely, it may seem a very reasonable supposition, that the figured surface of light, which we are capable of perceiving so distinctly in a dissected eye, must equally have formed a part of the visual perception of the individual whose eye thus exhibits it to us even after death. But if this supposition of the necessary perception of form, in consequence of the mere extension of the number of coincident rays of light at the retina, were truly of any force, it must be of equal force wherever there is a similar extension of particles of any kind that are capable of inducing sensation, in contact with the nervous expanse which they affect. There should, therefore, in conformity with this supposed result, be a gustual figure and an odorous figure, as much as a visible figure; for, though we cannot shew the fragrant or sapid corpuscles, that are at any particular moment acting on the nerves of any one, we are not the less sure, that these particles, to a certain limited extent in contact with the organ, are truly affecting a certain nervous expanse; and that if it were the

nature of such corpuscles to be visible like those of light, there would truly be a distinct image of them in the one case as much as in the other. All external things, acting on any parts of our nervous frame,—on the eye, the ear, the nostrils, the palate, the whole surface of the body,—act on a surface that is limited in shape, and are themselves also limited in shape. The extension, which is a common quality of all the organs and of all the objects of sense, is not more true of these in any one of the senses than in any of the others. But, though a figured surface is affected, it does not follow, nor has it ever been asserted, that in smell, or taste, or hearing, we have a perception of fragrant, or sweet, or melodious figure; and as little are we entitled, from the mere fact of the affection of a definite portion of nervous surface, in contact with a definite number of external corpuscles,—which is common to sight with all the other senses,—to affirm, that, where there is no conscious perception of any small visible figure corresponding with the extent of the rays of light at the retina, there yet must have been, at every moment of our vision, that very perception, of which we

have no present consciousness and no remembrance.

Another probable source of error, in this respect, is to be found in the constant union of extension with colour, in our mature visual perceptions; from which it is rashly inferred, that what is now constant, after habits of uniform association, that must have operated almost unceasingly, long before the period of our distinct remembrance, must have been equally constant before any such associations were formed. It is as impossible for us, indeed, at present, to perceive colour without extension, as it is impossible for us to read or hear our own language, without seeming, at the same time, to perceive the very meanings of which the characters or sounds are representative, and to perceive them as if they were immediately visible and audible, like the characters and sounds themselves. This impossibility of separating colour from *tangible* figure, it is not meant to deny; for it is a fact of which all are conscious, and is founded on the very associations on which the whole theory of vision is founded. But it must be remembered, that the impossibility relates wholly to the figure termed

tangible, which, notwithstanding this uniform coexistence with our sensation of colour, is allowed not to have formed a part of our original visual perceptions; and that there is no impossibility whatever, with respect to the supposed *visible* figure, with which, far from being necessarily and inseparably combined, it never has been combined in any one perception, as far back as we can trace our sensations of sight, through the whole period of our consciousness. It is only with the small figure of the surface of light at the retina, which is asserted to form a part of our visual perceptions, that the present question is at all concerned; and it is surely a very strange confusion of argument, that would apply to this figure what is true only of a very different figure, and, from our impossibility of separating colour in vision from the real magnitudes without, that are yet believed to have had no original connexion with it, infer a similar impossibility, and an impossibility so much earlier as to be original in our very nature, of separating it from something else, with which we never remember it to have been even once combined.

These two arguments, derived from the definite image on the retina, which we have found to be analogous in every respect to the affections of portions of nervous matter in the other organs of sense,—and from the impossibility of separating colour, in our visual perceptions, from figured magnitude, which we have found, however, to be in every instance the magnitude termed *tangible*, and not the *visible* figure, concerning which alone the question has arisen,—are the only positive arguments, which I can imagine to be adduced in favour of the perception of that figure as truly visible. It might be enough, perhaps, in such a case, to have shewn that there is no weight in those arguments; but I may venture to go still further, and say that the supposed coexistence of the two figures in our acquired perceptions of sight, is not merely unproved, but is impossible. If colour, as an original sensation in infancy, have been as little mixed with the notion of shape as odour or sound, and have become mixed with it only from the habitual coexistence of the primary visual sensations with certain tactual and muscular sensations, when the objects which we handled reflected light to our eyes, it

is easy to conceive how the one set of sensations might seem to mingle with the other. But, if the colour, which is thus diffused over the real magnitude of external things, have itself, in our very sensation, a peculiar outline, it is not easy, or rather I should say it is impossible, to conceive such a union. Colour, undefined, may seem to us to be spread over any space, when the only boundary that is perceived by us is of the wide space itself over which the tints are spread: but green white and yellow, in small spots, the whole of which together we perceive to be visibly and distinctly bounded within a space smaller even than the little surface of the retina, cannot be mingled diffusively with our notion of a far larger space, in the thousand feet of grass and daisies and other wild flowers that seem to spread for ever before us in the meadow over which we wander. In like manner, the small *plane* of colour, which forms what is called a visible figure of mere length and breadth, cannot be perceived as a plane, and at the same time form a part of the complex perception of *convexity* or *concavity*, in a tangible figure of three dimensions, when we continue to gaze on a mountain or a valley.

All which can be mixed with space, in one equal perception of a coloured surface, is colour merely, not another coloured surface, greater or less than that which we perceive, or of a form that is altogether incompatible with that which alone we are conscious of perceiving.

There is nothing, as I have already said, in the apposition of light to particles of nervous matter, more than in the apposition of particles of odour to an equal expanse of nervous matter, that would seem, *a priori*, to render the perception of figure more essential to the resulting state of the mind, in the one case than in the other: and if only a few of the bodies which we touch had sent rays of light to our eyes, and all of them had sent particles of odour to our nostrils, increasing or decreasing in number as the fragrant tangible body was nearer or more remote, I have little doubt, that the visual sensation would then have been as little connected with the perception of figure, as fragrance is now; and that, from the same influence of uniform co-existence of sensations, which mingles colour with form in our present perceptions of objects without, fragrance would have become, in

these circumstances, a sign of figure and distance, and have appeared to be spread superficially, in a union as indissoluble, over the surfaces of outward things.

But, whatever may be thought of this speculation, as to the probable result of such a mutual conversion of the present circumstances of smell and sight as I have supposed, in relation to the figure and distance of tangible magnitudes, it is not less certain, that the only *figure* which we have any consciousness of seeing, is that which is termed *tangible*, as corresponding with the real magnitude which we touch; and that the perception of the figure which is termed *visible*, in distinction from it, is supposed without evidence, or rather, I should say, in opposition to evidence. It is supposed *without proof*; for never, as far as we can trace back our feelings, have we been sensible, in vision, of any other coloured form, than that which is termed Tangible; and, since all our sensations arise equally from affections of superficial nervous matter, the image on the retina is not more figured, than the part of any other expansion of any other organ of sense, which is affected to a certain extent by its

particular object. It is supposed *in opposition to proof:* for it necessarily assumes, that, during the whole time of our gazing on an object, there is one mixed perception of coloured form, arising from the union of feelings that are incompatible. When the asserter of a visible figure, different from the tangible, is able to shew, that we have ever perceived visually, for a single moment, any such small shape as corresponds in size with the part of the retina affected, or even that there is more of extension in the affected part of the retina than in the affected portion of the expanse of any other organ; and when he is able to shew, that the perception of a small coloured plane, of the diameter of half an inch, can admit of being combined, in one complex feeling of a single form, with the perception or conception of a convex surface, of the diameter of many feet, which is thus at the same moment perceived to be plane and small, and convex and large; then, indeed, may we consider his assertion as worthy in some degree of that assent, which, in the present opposite circumstances of our consciousness, seems to me to have been very strangely given to it, without any proof whatever.

CHAPTER VII.

OF THE EXTERNAL AFFECTIONS, WHEN ACCOMPANIED WITH DESIRE.

In an analytical view of the Phenomena of the Mind, it is necessary, for distinctness, to treat of our sensations, as of all our other feelings, in separate Orders. But, in nature, it is rarely that our feelings are thus simple. The state of the mind is much more frequently complex; sensations mingling with sensations, and these often with intellectual processes of thought, and with varying emotions. Of all our elementary feelings, however, the most important in modifying the other feelings with which it may co-exist, is the Emotion of Desire,—an emotion so various as to its objects, so frequent in its renewal, and so powerful in its effects, as to have obtained, under the name of the Will, when considered with

a relation to the changes induced by it, a very prominent place in every system of philosophy of the Mind.

I. What is commonly termed the Will *, indeed, in relation to such changes, is not simple desire: it is desire with knowledge, and with a consequent anticipation of the particular result that is immediately to follow. But the most important element of the complex state of Will, is the mere desire of that particular effect which is said to be willed. The knowledge and anticipation, which, as elementary feelings, are the same in kind, whether relating to events that depend on us, or are foreign to us, are the result of experience only, by which we have before learned, that the particular effect desired by us has been, in similar circumstances, the immediate attendant of the very wish itself; and if, from a different arrangement of the sequences of events in nature, experience had not given us reason to make this

* For a fuller examination and analysis of the state of mind which usually goes under this name, I must refer to my "Inquiry into the Relation of Cause and Effect." Part I. Sect. 3.

anticipation at the moment of our desire, though we might still have wished the particular effect as before, the powerless wish would no longer have been termed *will*, but would have been classed as a mere desire, with all our other desires.

In the whole metaphysical vocabulary, there is, perhaps, no word which philosophers have contrived with all their art to render so mysterious as this little monosyllable. But, though a more accurate analysis shews, that all which distinguishes any particular *will*, as a mere state of the mind, from the analogous states of mind which are termed *desires*, is the accompanying anticipation of the instant sequence of its object, —a sequence so instant, as to render us less capable of recognising the antecedent desire as a mere desire, in the brief moment in which it begins and fades,—still the verbal distinction, if accurately understood, may in many instances be a very convenient one. We *desire* what may never take place, and what may, therefore, continue long as an object of our desire; but we are said to will only what it is impossible for us to desire above a moment, because it immediately

takes place, in consequence of our mere volition; the name of *will* being confined by definition to the desire of effects which are thus directly in our power,—that is to say, which take place merely because we have wished them to take place.

Our sensations, then, not being in our power, we cannot be said to will them, though we may still desire them, in the absence of their external causes, or in a state of disease which prevents the necessary organic affection, even though the external objects should be present. What is true of the prisoner in his dungeon, is true of the blind in the very sunshine of noon. They may wish for the delightful sensations of colour, as the deaf may wish for the pleasures of conversation or music: but, since the sensations do not arise in consequence of the wish, as requiring, together with the presence of external objects, which may or may not be present, and do not come to us at our bidding, a certain state also of the organs of sense, which may or may not be, whether we wish it or not; we, therefore, never speak of willing a sound or a sight, as we speak of willing the motion of our arm. Even the motion of our arm, which we are said to will, in a healthy state of

the body, we desire only, like any other object that is independent of us, when, by palsy, we have become incapable of producing the accustomed contraction of the muscles;—that is to say, when, in the state of palsy, the motion of the arm is no longer consequent on the wish to move it.

II. But, though we cannot will even a single sensation, we may, when various sensations have arisen together, or when many objects of a single sense are together present, desire to be impressed with some parts of the complex perception in a more vivid manner than with others: and in consequence of this very desire, the elementary sensations are greatly modified.

Such is the state of the mind, in that complex process which is termed Attention,—a state which has been supposed to indicate the operation of a peculiar specific Faculty of the mind, but which, in the case of attention to external things, the only species of it which we are at present considering, is nothing more than a sensation or perception accompanied with desire.

If we consult our consciousness during the state of mind which is termed Attention, we find no other elements than those which I have mentioned,—many sensations, arising from many objects,—a desire, more or less lively, of being impressed in a particular manner with one or more of these rather than with others. If no change had followed this desire, the term Attention never would have been invented to express the mere combination of it with affections of sense. But certain changes, of a very striking kind, do truly take place, in consequence of this union: the particular sensations to which the desire relates, become more vivid, the others become less vivid; and, though the result is in perfect accordance with what might have been anticipated from our knowledge of other general facts with respect to the mind, it is not wonderful, that phenomena so striking should seem, where the necessary analysis and comparison with kindred phenomena have not been made, to be indicative of a specific Principle or Faculty from which they have flowed.

The elements which the analysis exhibits, I have already stated; and all that remains is to

explain the vivifying influence of the desire, on which the peculiar results of comparative distinctness and indistinctness of the parts of a complex perception depend.

For this purpose it is necessary to attend to some general laws of the mind, that are common to all our other complex feelings, as well as to the affections of sense, which we have at present particularly in view.

When many sensations co-exist, each is comparatively fainter than if it existed alone: and when, of many co-existing sensations that may all be of equal vividness, one becomes, from whatever cause, more lively than the others, the others become fainter, not merely in relation to the livelier feeling, but in relation also to the state of liveliness in which they were felt before;—so much fainter, when the co-existing sensation has become greatly more intense, as to cease often, in these circumstances, to be at all distinguishable. These are physical facts, which innumerable observations verify.

It is another physical fact with respect to the mind, that our emotions vivify every perception which harmonizes with them. There is not a

passion, that does not give to its objects, even as conceived, a prominence and brightness almost like present reality. The effect of love, in this respect, as spreading in the mind of the lover a livelier colouring over every thing, however dull and insignificant before, that has been endeared to him by a connection with his tender delights and wishes, is only one of innumerable examples of this sort of vivifying influence: and what the desire of love does, every other desire effects in like manner, in proportion to its own vividness.

These facts, which we must admit, whatever our opinions may be of the nature of attention, are sufficient, as it appears to me, for explaining its phenomena. We perceive many objects together; and each object on that account affects us less powerfully than if it were the only one that produced in us sensation;—we wish to know one of these objects more particularly than the rest:—it becomes instantly, by the influence of this exclusive wish, more prominent and impressive than before, and in proportion as it acquires vividness the other parts of the group that are

not objects of our attentive curiosity seem gradually to fade away. Such is the whole process of which we are conscious: and we require no peculiar Faculty, to account for the phenomena; they flow readily from the more general principles of our mental nature, to which I have traced them.

III. What is thus true of attention to external things, is equally true of attention to the internal affections of the mind,—the class of its phenomena which we are next to consider. It is the same vivifying influence of mere desire, that renders one *conception* more lively than another in a complex group, as it renders one *perception* more vivid than another, when many objects are together acting on our organs of sense; and in both cases alike, the increased intensity of the parts that harmonize with the desire is followed by a diminished intensity of the other parts of the complex whole that do not harmonize with it. To attend, is simply to wish to know: we are conscious only of the wish and its effects; and it is truly a beautiful provision in the economy of

the mind, that what we wish to know becomes immediately on that very account, by the influence of the ordinary laws of thought and emotion, more easy to be known.

SECTION III.

OF THE INTELLECTUAL STATES OF THE MIND.

CHAPTER I.

CLASSIFICATION OF THE PHENOMENA.

ALL the feelings of which the mind is susceptible, have been already divided by me into two classes, according as their causes are External or Internal; and having considered the former class of External Affections of the mind, we have now to proceed to the consideration of its Internal Affections.

These it will be necessary to subdivide into distinct orders.

I. In the classification of our feelings, as in that of any other phenomena, it is evident that we may err in two ways,—by excessive simplicity or by redundance. We may force under one name various feelings that have little general re-

semblance, or we may invent many verbal distinctions for seeming varieties, which a more minute analysis would have shewn to be of the same general character, and to be reducible with advantage to a single division, in an arrangement of simpler phraseology.

The most striking example of the former species of error, with respect to the mind, is to be found in the system of CONDILLAC and other French metaphysicians his followers, who consider all our feelings, in our internal processes of thought and emotion, as mere *Sensations* variously *transformed.* What the nature of the *transformation* is, by which the affections of sense become reasonings and desires, they have not thought it necessary to explain very clearly; contenting themselves with the mere fact of the priority of our sensations to all our other feelings, as if priority and succession were enough to constitute identity,—or repeating the unsupported assertion in many new forms and applications, as if mere frequency of asserting a proposition were itself a proof of its justness,—or occasionally calling in the aid of authority, and professing to consider themselves as followers

of LOCKE, in a doctrine which is wholly unsanctioned by the very different views of that great philosopher.

Such is one species of error of arrangement with respect to the phenomena of the mind. It is not an error which has been very prevalent in the intellectual philosophy of Britain. In the northern part of the Island, especially, an opposite error has prevailed: and the philosophy of Dr REID, with its long catalogue of Intellectual and Active powers of the mind, may be considered as exemplifying one extreme, as the philosophy of CONDILLAC exemplifies the other.

It is easier, however, to discover deficiencies or redundancies of this kind, or to suppose that we have discovered them where there truly may be none, than to catch and preserve for our continued guidance that almost invisible line, on either side of which is deviation into error. However just any arrangement of our own may appear to ourselves, we must be aware, that it cannot appear juster to us, than the arrangements to which we have preferred it, most probably appeared to their authors. Yet we are not the more on that account to adhere to a classification

that appears to us faulty: it is a reason only for caution and humility in the statement of any new arrangement which we may venture to propose.

II. The class of Internal Affections I have divided into two Orders,—Intellectual States of the Mind, and Emotions;—the former of which orders alone we have at present to consider.

Our Intellectual States of Mind, however much they may specifically differ, will be found, even in their minutest variations, to exhibit only two generic diversities,—diversities which, in the ordinary metaphysical sense of those terms, may be expressed very nearly by the phrases, *Conceptions*, and *Feelings of Relation*. Our whole trains of thought, if we abstract from them the Sensations which external objects may occasionally induce, and the Emotions that may frequently mingle with them, will be found to be composed of these, and of these alone. It is the very nature of the mind to be susceptible of these in certain trains; one perception or conception suggesting, or, in other words, having for its immediate consequent, some other conception; as when the sight of a

picture suggests the Artist who painted it, and the conception of the painter suggests, in like manner, the name of some other artist of the same School, and this afterwards the City in which that School of painting chiefly flourished. The successive conceptions, in such cases, arise in the mind, in the absence of the external objects that produced originally the corresponding perceptions; and, though capable of being modified to a certain extent by states of the bodily frame, are, as far as any discoveries of the physiologist have yet been able to throw light on their origin, Internal Affections of the Mind,—results of a tendency of the mind itself, in certain circumstances, to exist in one state after existing in some other state. The tendency to this renovation of former feelings has commonly received the name of Association of Ideas;—a name that is faulty in various respects, as limiting to our mere Ideas an influence which is not confined to them, and as seeming to imply some mysterious process of union as necessary before the suggestion itself; which, whether it be found to be true or not, on a more subtile analysis of the phenomena, is at least not very easy

to be reconciled with the opinions of those who invented, or have continued to employ the phrase. I have preferred, therefore, for the sake of greater precision, and for avoiding the intermixture of any thing that can be considered as conjectural, the name of Simple Suggestion; meaning by that phrase to express nothing more than is actually observed by us, in the readiness of certain feelings to arise after certain other feelings, as resemblances of former perceptions or conceptions or other preceding states of the mind; and restricting the phrase uniformly to such simple sequences of the similar feelings, exclusively of all notions of relation of object to object, that may occasionally arise from them, and be intermingled with them.

Our trains of thought are not composed, then, merely of such conceptions, or other resemblances of former feelings, that begin, and continue, and pass away, as it were separately, without impressing us with any common relation which they bear. In the same manner as one conception suggests another conception, the perception or conception of two or more objects suggests or gives rise to certain feelings of relation, which,

as states of the mind, differ from the mere perceptions or conceptions themselves, that have given rise to them, not merely as these perceptions or conceptions appear to differ from each other, but generically as a distinct order of feelings.

There is an original tendency of the mind to the one species of suggestion, in certain circumstances, as much as to the other; and as to the one of these, which affords us mere copies of former feelings, I have given the name of Simple Suggestion; to the other, which developes a new order of states of mind, in our feelings of relation, I give the name of Relative Suggestion;—using the term Suggestion in both cases, as that which expresses most simply the mere general fact of the rise of the feelings in succession, without involving any hypothesis as to processes of former association, or any other circumstances, that may be justly or erroneously supposed to connect them.

That our trains of thought, as purely intellectual states of the mind, are indicative of these two tendencies alone, and that it is only from imperfect analysis, which seems to present diffe-

rences when there truly is no generic difference whatever, that they have been referred to a greater number of supposed Faculties, will appear, I flatter myself, on a review of the phenomena, to which we are next to proceed, under the two heads to which I have referred them.

CHAPTER II.

OF THE PHENOMENA OF SIMPLE SUGGESTION.

THE primary mental susceptibility of the influence of external things, which we have considered as it is developed in one class of affections of the mind, is the direct source, as we have seen, of innumerable varieties of feeling. But, valuable as it is in this respect, it is still more valuable for its relation to other states of the mind, to which it indirectly gives rise, by the internal suggestion of feeling after feeling. Without a tendency of this kind, the susceptibility of the external influences of the objects of sense would be a source to us only of momentary pleasure or pain, according as particular objects may have chanced to be present, without any power in us of avoiding the one or prolonging or renewing

the other, or of availing ourselves of the simple physical means which are necessary for the preservation of our animal being. The single instant of sensation would be all: and, as there could neither be memory nor foresight, the past and the future would virtually be nothing. We reason with respect to the future, by remembering the past; and we remember the past, in consequence of that particular tendency of the mind to suggestion, which is the subject of our present inquiry.

I. That there is a tendency in the mind to renovations of feeling, less vivid indeed than the original affections of Sense, when external objects were present, but still so very similar to those primary states of the mind, as to seem almost copies of them, in various degrees of vividness or faintness, is shewn by all the trains of our thought. There is scarcely an object at which we can look for a moment, without the instant rise in the mind of the conception of some other object that is absent; and this conception is followed, perhaps, by some other conception or feeling of relation or emotion; of which internal af-

fections, as they mingle in various combinations with the sensations which external things are almost constantly inducing, the whole mental history of every day is composed.

The renovating influence of which I speak, however, is not confined to the affections of Sense, in those faint seeming copies of them which are termed Conceptions. It extends to every species of feeling, and is therefore, as I have already remarked, very inadequately expressed by the phrase Association of Ideas, which would seem to limit it to such conceptions only. The judgments which we have formed, the emotions which we have felt, on any particular occasion when certain external objects were present,—judgments and emotions, that were then, perhaps, influenced to a very great degree, by circumstances which no longer exist,—are yet apt, as mere feelings of the mind, to rise again to us in new circumstances, in connection with the objects that primarily excited them, and thus to root themselves as it were in our intellectual and moral character. It is by this wide influence of the suggesting principle, as extending to our opinions and passions as well as to our mere conceptions, and only

by this wide influence, that the growth of prejudices and habitual tendencies of every sort in the mind, can be adequately explained; and it is an influence, which, but for the invention and constant use of the more limited phrase, we should never have hesitated to admit.

The cause of the general limitation of the influence to associations of *Ideas*, it is not difficult to discover. The feelings of relation, which constitute our judgments, may arise at one time, as they arose at another time, by the same primary tendency, on the contemplation of particular objects perceived or conceived. Our emotions also, if once excited by certain objects, may be excited again by the same objects, on the same principle as that by which they were excited at first. We therefore cannot distinguish, in any particular case, the influence of simple suggestion from the primary influence; and what may have been as truly the result of this renovating tendency in the mind, as any conception which has been induced by some former conception, is ascribed, therefore, to the original susceptibility that first developed it. But, when the conception of an object is excited, in the absence of that object,

it is impossible for us to make the same reference. We discover instantly, in this case, that the cause of the feeling must be different from the cause of the original perception, when the external object was present; and we are obliged, accordingly, to invent some phrase, to express the peculiar tendency of the mind, from which the renovated feeling may be supposed to have flowed.

The tendency of the mind, by which the perception of one object suggests the conception of some other object that was formerly perceived by us at the same time, might suggest, then, in the same manner, other feelings of every sort, that may have co-existed with the original perception. But, from the difficulty which I have now stated, of distinguishing the suggesting influence in such cases, it will be more convenient to use, in our chief illustrations of the tendency, the order of feelings that are commonly termed Conceptions or Ideas, and to avail ourselves of our knowledge of the more extensive influence of the Suggesting Principle in the mind, only in explaining phenomena which cannot be satisfactorily explained without such a reference.

I proceed, then, to the consideration of the phenomena of Simple Suggestion, with particular reference to our conceptions.

II. The general fact of the rise of one conception, in immediate suggestion by some other conception or perception, is shewn, as I have said, by all the phenomena of our trains of thought; and it could scarcely fail to be soon remarked, that the suggestion is not wholly vague and indiscriminate, but that certain conceptions are, according to circumstances, more readily suggested than others. Of the knowledge of this readier suggestion, the use of verbal language, even in the rudest state of barbarous life, is a sufficient proof; as are all the rude symbols of every sort, that are employed by the most ignorant tribes in the first dawnings of civilization, for recording events in which they have nationally or individually taken interest.

What even savages could not fail to discover, must have been remarked by philosophers of every Age. Yet, though the tendency to particular suggestions must have been the basis of all practical education, so little attention had been

speculatively paid to the laws which regulate them, that Mr HUME, in reducing under a few general heads the phenomena of "the association of ideas," in his Essay on that subject, conceived himself to be the first who had attempted any such arrangement.

The opinion of the originality of the attempt was indeed an erroneous one; since a brief enumeration of the kinds of reminiscences, very similar to his own division of them, is to be found in one of the Works of the great Founder of the Peripatetic Philosophy, and in other works of intervening authors, both of the time of the schoolmen and of more recent date. But the high authority of Mr HUME'S name has given to his classification an importance and a consequent claim to our consideration, greater, perhaps, than in other respects it might justly be considered as deserving.

Resemblance, Contiguity in place or time, and Causation, are according to him the principles of association of our ideas. Causation, it is evident, on his own principles, may be reduced to the head of Contiguity, of which it is in truth the most exquisite example: and Contrast, which he

endeavours in vain, by a sort of obscure and almost contradictory analysis, very unworthy of his general acuteness, to reduce under the mixed influence of Resemblance and Causation, is at least as well entitled to form a separate class, as either of the two to which he would reduce it.

III. It is, perhaps, however, only in consequence of our imperfect analysis of the phenomena of Suggestion, that it has been thought necessary to reduce them under distinct heads. It appears to me at least not improbable, that, on a more minute examination, they may all be found to admit of being considered as examples of the single influence to which Mr HUME has given the name of Contiguity; and that every suggestion, therefore, may be necessarily of feelings that have previously co-existed, or been so immediately proximate in succession, that the rapid sequence, where one feeling has scarcely ceased when the other has begun, may be considered almost like co-existence.

Resemblance, for example, is said to be a principle of association. But, if one object resemble another, it must resemble it in some particular

circumstance or number of circumstances. There must be some part, therefore, greater or less, of the complex perception or conception of each, that is the same, or nearly the same, as some part of the complex perception or conception of the other; and as, in both alike, this commmon element has co-existed with the other elements of the complex whole, it may, in either case, when only one of the objects is present to our perception or our thought, be sufficient for the reciprocal suggestion of the similar object, and may produce this effect without any other influence than that of the mere proximity of one part to the other parts that have before co-existed with it. In like manner, when two objects are strongly contrasted in any quality, they must agree at least in this one respect, that they are both extraordinary in relation to that quality: they are extremes of it, though different extremes. Each, therefore, singly, may have excited this common sentiment of extraordinariness with respect to the same particular quality; and the feeling of extraordinariness with respect to the same quality, that has attended the perception of both objects, may, like any other part of a complex whole in which two

objects agree, be sufficient to produce a reciprocal suggestion, by the influence of mere co-existence.

If a very minute analysis of this kind were made in every case, it appears to me, as I have said, far from improbable, that some common element might always be detected, and that every suggestion might thus be found to be resolvable into the influence of mere co-existence or proximity. But since, in many cases, the analysis which would be necessary for developing such an element must be a very subtile one, and therefore liable to great risk of error; and since the suggestions of resemblance and contrast, when we endeavour to look back on the rapid transition from feeling to feeling, appear to be as instantaneous as those of contiguity in its more evident form, we must be aware that the possibility of such an indirect elementary suggestion as I have supposed, is not sufficient to prove it to be in every case accordant with the actual process of nature. It may still be directly by their resemblance or contrast, that objects similar or opposite in qualities reciprocally suggest each other; though we may be able, technically, by a process

of refined analysis, to discover some common element, which, by its former co-existence with the other elements in both, might, as we suppose, have been sufficient to give rise to the mutual suggestion.

IV. Without rejecting, therefore, the more subtile analysis in such cases, it may, perhaps, in the present circumstances of our knowledge, be safer at least, to consider these instances of suggestion in the light in which they have commonly been considered, as primary and general, rather than as secondary results of such a partial elementary proximity as I have supposed. In that case Resemblance, Contrast, and former Proximity, whether of co-existence or succession, may be regarded as the general principles on which suggestion depends.

1. The resemblances that give rise to suggestion may be in *things* themselves; as when one person or scene brings before us in conception, by direct similarities of form, some other person or scene;—in more shadowy *analogies*, whether of the poetic kind, as in all those simili-

tudes which render figurative language so delightful, while it is felt to be in accordance with the natural order of thought; or of the philosophic kind, as in those analogies of causes and effects, or means and ends, which lead to discoveries in science or inventions in art:—or in the mere *signs* of things, as when particular words suggest indirectly, and without any consciousness in the mind of the cause of the transition, new trains of thought, by the primary suggestion of other words that agree with them in sound, and that, as themselves significant, awake in their turn the conceptions corresponding with them; or impress us more powerfully with the relation of mere sound, that has occasioned this suggestion, in the remarkable cases of puns and rhyme and alliteration.

2. As the similar qualities of objects are causes of their mutual suggestion, they suggest each other, likewise, by extreme opposition: and as we owe to the connecting principle of Resemblance the metaphorical language of poetry and eloquence, we owe to the suggestions of Contrast another very powerful rhetorical figure,—that

of Antithesis; the beauty of which arises chiefly from its harmony with the natural tendency of the mind to suggestions of this species, or which at least would not be felt to be beautiful, if either from such frequency of repetition as would mark it to have been studiously sought, or from any other obvious unaccordance, the antithesis were of a kind that could not well be supposed to arise naturally as a part of the train of thought, in the particular circumstances represented.

3. The suggestions of Proximity, even though we should not endeavour to reduce to them the other species already considered by us, must be allowed to be of the most extensive influence on our trains of thought. If we owed to them nothing more than our knowledge of language, which is evidently acquired in this manner, by the reciprocal suggestion of certain signs and of feelings that originally co-existed with the perception of the signs, it would be impossible to estimate at a rate sufficiently high the amount of advantage which we have derived from this tendency of our nature. What is thus evident, in the case of language, is true of our remem-

brances in general. Memory is not a vague indiscriminate recaller of the past in insulated portions; in which case it could not be of the slightest aid to us. It is the recaller of it in regular connection of place with place and event with event, giving origin to many sciences that are founded on this order of proximity; and enabling us practically to anticipate for the future, the results which we have before observed, and which, we believe, will be produced again by similar combinations of circumstances, as often as these may recur.

V. If, however, by the various relations which they promiscuously bear, any one object may recall to us many other objects, similar, contrasted, or formerly proximate, must there not be some qualifying tendency of the mind, that, where the circumstances in other respects might be equal, determines, in each particular case, the suggestion of one object rather than of another? The general relations, whatever they may be, according to which objects are variously suggested, may be termed Primary Laws of Suggestion; and the modifying principles, whatever they may be, that

render definite in each particular case, what might be various and vague, if the primary laws alone were to have influence, may be termed, in reference to those general principles, Secondary Laws of Suggestion.

Even the writers who have endeavoured to class what I have termed, in conformity with their view of several distinct principles of association, the Primary Laws of Suggestion, have paid no attention to the Secondary, which are of equal importance, or, at least, have made no attempt to class them.

These Secondary Laws of Suggestion appear to me to be the following.

1. When all other circumstances are the same, one suggestion will take place rather than another, according to the longer or shorter continuance of the original feelings, when they primarily co-existed or succeeded each other.

2. In the second place, a similar difference will take place, according as the original feelings were then more or less lively;

3. In the third place, according as they have been more frequently renewed in the same order;

4. In the fourth place, according as this order of sequence has been more recent;

5. In the fifth place, according as the primary conception in the sequence has co-existed less with other conceptions, or other feelings of any kind, that have no peculiar connexion with that which is suggested.

6. In the sixth place, the influence of the primary laws is greatly modified by differences that are constitutional in the individual, and that continue during the whole course of life, to give a peculiar direction to the suggesting principle. Such are the differences of Genius, or of Temper or Disposition; in all of which words an evident reference is implied to an original source of these varieties in the very frame of our being.

Let us consider, in the first place, the intellectual differences of Genius, in their relation to Suggestion.

In the intercourse of social life, it is impossible to give the slightest attention to the minds around us, without being struck with one remarkable diversity,—a diversity which is rendered sufficiently manifest in the most ordinary conversation on the most familiar subjects. In some minds, the tendencies are wholly to suggestions of *proximity*: They tell us, perhaps with perfect accuracy, what they have heard or seen or read, but they tell us only what they have heard or seen or read: their very wit is the wit of others; and though they may be excellent conveyers of knowledge, they never add to the knowledge which they convey, nor render it more attractive by any new grace of sentiment or diction. In other minds, there is a very powerful tendency to suggestions of *analogy*: the events which they relate become, therefore, a source of immediate illustration, by resemblances that had never been traced before, or even suspected; and in their sprightly sallies of original wit, image after image is poured upon us in dazzling profusion, as from a source that is inexhaustible.

It is in this tendency to the new and copious suggestions of analogy, that the distinction of

Genius appears to me to consist; the theory of which, therefore, is far simpler than is commonly supposed. A mind in which this tendency prevails is, from that very circumstance, necessarily inventive : for all to which we give the name of Invention, having a relation to something old, but a relation that was never before suspected or practically applied, is the suggestion of analogy. It is evident that there could be nothing new in the products of suggestion, if objects, according to their mere proximity on former occasions, were to suggest only the very objects that had before co-existed with them : but there is perpetual novelty of combination, when the images that rise after each other, by that shadowy species of resemblance which we are considering, are such as never existed before together or in immediate succession. Hence flows the rich figurative language of poetry, which is the developement only of such resemblances, expressed in the order in which they have arisen silently and spontaneously in the mind:—hence, in like manner, flow the discoveries and inventions of scientific genius, when one phenomenon, as soon as it is perceived, suggests analogous phenomena, or one work of

art suggests other analogous means, which may produce more simply or powerfully a similar result. Give to the mind of an ordinary writer, who on every subject that exercises his thought, is impressed only with what he has before read in the works of others, and whose fancy, therefore, in all its disguise of slightly varied phrases, is only memory under a prouder name, a tendency to suggestions of analogy; and in the moment of that single change, what was merely imitative will become inventive, and astonish us with a freshness of imagery and diction. In like manner, if we could take away this tendency to suggestions of analogy from the most richly gifted genius, and give in its place, a prevailing tendency to suggestions of proximity, the mind to which we had looked with the highest admiration, for the new and beautiful products which it had poured on us, would lose all its originality, and become instantly as dully imitative, as if it had never been capable of rising above the common-places of rhetoric.

I have, in the present discussion, for reasons already stated by me, considered the suggestions of analogy as generically distinct; in which view

of them, their opposition to the grosser instances of proximity, in relation to the originality of genius, is sufficiently apparent. But if, in conformity with the more subtile analysis which I ventured to propose, even the suggestions of analogy admit, perhaps, with all other suggestions, of being reduced to the single influence of proximity, it will be necessary to explain, in that case, the diversity which I have stated to be thus characteristic of genius. It will still be true, as before, that genius is characterized by a tendency to suggestions of analogy; though the tendency must then be indirect, not of primary operation, and what has not been proximate in itself, as far as the mere conceptions are concerned, must become proximate through the medium of some other feeling, that has been common to the objects which exhibit the analogy. I have already alluded to the error of the phrase Association of Ideas, as limiting to one set of feelings, an influence that is of much wider operation. Our Ideas or Conceptions are not the only states of mind that are subject to it: it extends equally to our Emotions, and to all our other feelings. It is in this way, therefore, that I conceive it to

be possible at least for the suggestions of analogy to take place, not directly as a sequence of mere conceptions, but by the intervention of some emotion or other common feeling, which the analogous objects have each a tendency to excite, and have before separately excited. Our similies and metaphors are all founded on some agreement of this kind, of the feelings that have attended the separate contemplation of the analogous objects: and he in whom the most lively emotions are excited by objects, or who is accustomed to give his mind most freely to their sway, so as to indulge the longest in the contemplation of the objects that excite them, will, in consequence of this greater liveliness and frequency and permanence of the resulting feelings, have a greater variety of conceptions that have co-existed with them on different occasions, and that admit, accordingly, of reciprocal suggestion. When the corresponding emotion, therefore, has been excited by any new object, it is not wonderful, that some one of the objects which before excited it should rise to the mind, as if suggested directly by the common analogy in this respect. It thus happens, that the suggestions of analogy, which constitute

poetic invention, are most abundant in minds of the liveliest feelings;—a characteristic difference, which might have been anticipated, as agreeing exactly with the general notion of the poetic character of thought; in our internal pictures of which, we never fail to combine a tendency to more vivid emotions than those of ordinary minds, with that very novelty of conceptions which I consider as arising from it.

In like manner, in the analogies which lead to physical discovery and invention, there is always some partial proximity that may be found in the parts of the train of thought; because there is always some circumstance common to the causes and effects or means and ends, that are said to be analogous on account merely of this common circumstance. The connecting link, however, in this case, is not often, as in the suggestions of poetic fancy, a common emotion which the analogous objects tend equally to excite; though a tendency to lively admiration of the wonders of nature and art, by leading the mind to contemplate them in their varied aspects more intently and permanently, may sometimes operate in the same way. It is usually a feeling of a

less vivid kind, the result of minute analysis; indicative, therefore, of a frame of thought, which, though in some respects similar to that of the poet, is in many other respects very different from it. There is no phenomenon that can be observed by us, whether in nature or in art, which is not to a certain degree complicated. It has a concurrence in it of many circumstances; some of which are essential to the production of the particular effect that is chiefly in our view, while others are accidental, and may vary, without any variation of this particular effect. He, therefore, who analyses most minutely the whole complex physical sequence, will at once be the quickest to distinguish the essential from the accessory and unimportant circumstances of that particular sequence, and, in consequence of this internal separation of part from part, will be the quickest also to arrive at the elements which are common to the phenomenon observed at the moment with other kindred phenomena observed before. In such a mind, accordingly, the suggestions of analogy will be far more abundant, than in a mind which is little accustomed to minute analysis; because, to the analytic intellect, the part of the

complex whole in which the resemblance consists, that leads from analogous cause to cause in nature, or from analogous means to means in art, is most distinctly present. If, in some moment of solitary musing, we were to observe the fall of an apple to the ground, we might think of various properties of the apple, of the earth, and of the atmosphere through which the apple had fallen: and the complexity of the phenomenon, as thus considered, might not lead to the suggestion of any other phenomenon which did not partake in some measure of that complexity itself. But, if it were the character of our mind to love to view separately the minute parts of a complex phenomenon; and if, therefore, in observing the fall of the apple, we were to lay out of view all other qualities that might be affecting our senses, and to consider in it the mere tendency of one mass of atoms toward another mass of atoms; there can be no doubt, that the similar tendency of other masses of atoms toward other masses of atoms, as in the planetary movements, if these had frequently before been objects of our thought, would occur to us more readily than if the common or analogous circumstance of

gravity in the fall, in union with all the other sensible qualities of the earth the apple and the atmosphere, had been less simply present to our contemplation. When all other circumstances are the same, therefore, he, we may take for granted, will be the most inventive philosopher,—or, in other words, the philosopher to whom analogous causes and effects, or means and ends, will arise in readiest sequence,—who is accustomed to analyse most minutely the phenomena observed by him, and whose experience of causes and effects, or means and ends, is at the same time most extensive, so as to allow the most varied suggestion of analogous phenomena, when the circumstance that is common to them is, on such minute analysis, most distinctly evolved and perceived.

But whether we go back the step which we have now taken, in accounting for suggestions of analogy by the influence of proximate emotions or other feelings, common to the kindred images, in the quick and varied inventions of poetic and scientific fancy; or content ourselves with classing analogy as in every such case a direct and peculiar source of suggestion; the distinction of

genius by this characteristic tendency is equally well marked. The musings of an ordinary intellect are an iteration of former thoughts and images, received in the same order from the writings or conversation of others; and therefore present us with nothing that can be considered as new; but a mind that has been more highly gifted with a tendency to suggestions of analogy, whether direct or indirect, has all the seeming inspiration which is the accompaniment or result of that peculiar tendency, and in the new combinations which it forms, seems to give novelty to every image, merely by presenting it in a different order. What would otherwise have been mere Memory, is by this difference alone converted into Fancy or Imagination.

Such as it appears to me is the nature of the influence of the constitutional differences of Genius in modifying suggestion: and a similar influence is exercised, in modifying the primary laws of that principle, by constitutional differences of another kind.

These are the diversities of Temper or Disposition. There can be no question, for example, with respect to one of the remarkable contrasts of this sort, that some minds

are naturally more cheerful or more gloomy than others; and as little can there be any question, that the cheerful and the gloomy have a natural tendency to the suggestion of objects that accord with their own gay or melancholy character. There is thus a continued, or at least a frequent re-action of the mental temperament on the train of thought, and of the train of thought on the original disposition; the reveries of every hour flinging back over the gaiety that had brightened them a colouring still brighter, or over the melancholy that had darkened them a still colder and drearier gloom.

The theory of this influence involves no great difficulty. It is indeed very similar to that of the influence of genius, in the fine species of proximity which I suppose to constitute or give occasion to the suggestions of analogy. The common emotion, which kindred objects tend to excite, is the cause of the reciprocal suggestion. The cheerful are under the influence of a vivid feeling, that has been excited at different times by many agreeable objects; the melancholy are under the influence of a feeling that has been excited in like manner by many objects of an

opposite kind: and, as that vivid feeling which has co-existed with many agreeable objects of thought may naturally suggest them all, that which has co-existed with many objects of a saddening species, may be expected as naturally to renew those images of sadness.

7. In the same manner as the influence of the primary laws of suggestion is modified by lasting differences of temper or disposition, it is modified also by differences in this respect which are less permanent,—by the days or hours or minutes of good or bad humour, and in general of all the emotions, pleasing or painful, that are able while they last to warm even the sullen to occasional sprightliness and kindness, or, by an opposite transformation, to convert "the gay to grave, the lively to severe."

The secondary modifying influence, however, being exactly of the same kind, whether the emotion be accordant or unaccordant with the general character; it is unnecessary to repeat, in application to the fleeting diversities of the hour, the remarks which have been made on the more lasting peculiarities. The occasional sadness of

the cheerful, like the sadness of those who are constitutionally melancholy, will lead to the suggestion of accordant images: but there will be a less wide and varied suggestion of such images in the one case than in the other; because, when all other circumstances are the same, the emotion that has been most frequent and lasting must have co-existed with the greatest number of harmonizing objects of thought.

8. Another secondary influence on the trains of thought is derived from the state of the body.

We are too little acquainted with the intimate relations of our bodily and mental part, to know in what manner this secondary influence operates; but of the effects of its operation we cannot doubt. In the languor of sickness;—in the vigour and alacrity of good health;—in the hours before and after a plentiful meal,—still more, under the intoxicating influence of wine or opium; there is a difference in the slowness or rapidity and in the kinds of suggestions, which every one must have observed in himself or in others,—a difference for which it is impossible to

account by any causes that are not, in part at least, corporeal.

9. Another modifying influence in suggestion is that of general habit. I do not speak of cases in which the suggesting and suggested conceptions have frequently co-existed before: — for then the habit would only be one of the ordinary forms of the suggesting principle itself in its universal operation;—but of cases in which the conception suggesting and the conception suggested may never before have existed together, yet arise in rapid succession, in consequence of a general cast of thought, superinduced variously by circumstances peculiar to the individual. Such is the effect of long-continued and exclusive professional studies or practice. The technical pedantry which these produce, while, on the simplest occurrences of common life, it is continually giving rise to allusions that are intelligible only within the circle of those who are conversant with the same studies and practice, and that appear ridiculous beyond it, is but an exemplification of this natural influence of customary thought. An object seen for the first time may recall in this

way to persons of different professions different objects; because it recalls most readily the objects that have been most familiar to each. The varied suggestion, in such a case, is not of very difficult explanation. It takes place by the influence, direct or indirect, of some resemblance of the new object to objects better known. If resemblance be itself a principle of direct suggestion, there is no wonder that the similarity should be felt most strongly with respect to objects of which, as most familiar, all the qualities that admit of similarity have been repeatedly before the mind: and, if it operate only indirectly, by the intervention of some common feeling, excited by the new object, and excited previously by other objects, it is as little wonderful, that, in circumstances in which, by supposition, the resemblance is equal to many objects, more and less familiar, this common feeling which has co-existed more frequently with one of these than with the others, should induce most readily the conception of the familiar object with which it has most frequently co-existed.

Of these secondary Laws of Suggestion which we have now been considering, many frequently

concur in relation to the same object. But, whether they operate singly or together, the influence of one or more of them appears to me to be necessary, in every case, for determining suggestion to one object rather than another; when many objects might equally be suggested, in conformity with the relations that constitute its Primary Laws.

VI. A train of thought may be suggested, either by the perception of a real external object, or by a mere conception or other feeling which itself has formed a part of some preceding train of thought. But, though a new conception may be induced in both ways, it is far from indifferent to the liveliness of the subsequent feeling, in which of the two ways the suggestion of it have taken place. The thought of a beloved friend, for example, may, after his recent death, arise to our mind on innumerable occasions: but, if it arise on the sight of some book which we have read together, of some drawing which has been a work of his pencil, or of any other object that is a relic and memorial of his former presence with us, the conception itself is more vivid,

and our emotion of tender sorrow more instant and overwhelming.

A considerable part of this difference certainly arises from the greater permanence of the object of perception than of a mere conception; in consequence of which, as Mr STEWART has justly remarked, a greater number of conceptions akin to this particular object cannot fail to arise, when the object is one that is interesting in itself; the effect of which series of conceptions as a whole, may well be supposed to be greater, than the effect of any one of them would have been, if it had arisen singly. But, though the longer continuance of the kindred perception may be one cause of the difference of result, it does not appear to me sufficient to account for the whole, or even the principal part of the diversity, in a phenomenon so striking. Above all, it does not account for the suddenness of the lively emotion, in such a case as I have supposed of unexpected discovery of any relic of affection, or other object, that harmonises with the grief which is felt at the moment, or which is ready to be awakened; when the unexpectedness, instead of being a cause of slower or lessened emotion, produces in

the instant, by that very circumstance, an overflow of far livelier sorrow than a thousand mere conceptions, all connected as closely with the object of our grief, and following each other in continued sequence, could of themselves have produced. In such a case, it is vain to look to the mere permanence of perception for the increasing vividness of an emotion, that is most vivid in the first instant, or almost in the first instant. Some other circumstance, or combination of circumstances, must be taken into account.

In a slight sketch like the present, there is not room for a full analysis of all the circumstances, on which I suppose the remarkable differences of result to depend. The most important, however, as it appears to me, are the felt reality of the object of perception, and the diffusion of this feeling of reality to the kindred conceptions, that co-exist with it as one harmonizing group. Without the presence of the external object, these conceptions, inconsistent with all that was perceived by us in the real scene around us, would have been felt as imaginary only: but, with it, what was felt as imaginary before seems instantly to live to our very eyes; because the

feeling of reality, which the object, that is at the moment the most prominent and interesting of all existing objects excites, is a feeling that readily mingles with the whole kindred group, of which the perception itself is but a brighter part. The friend, whom we merely remembered before, is therefore, for a moment, with us again; because that is truly with us again, with which his living form was before mingled in perception, as it is now mingled with it ideally; and though, at every second moment, the instant reflection that he lives no longer checks this tender illusion, the illusion itself returns in the succeeding moment, with the same impression of reality, that has flowed again as before from the object perceived to the harmonizing conception. There is thus, till the very impression of disbelief have become, by the frequent renewals of it, associated with the perception itself, so as to destroy or lessen the diffusive influence, an alternate breaking and restoration of the dream; but a rapid alternate change of this sort, as many analogous phenomena of our emotions shew, instead of lessening the vividness of such feelings, is the very circum-

stance that tends most powerfully to heighten them.

That the union of perception with conceptions that harmonize with it does truly vivify those harmonizing conceptions, by giving a sort of mixed reality to the whole, is shewn by some of the most interesting phenomena of thought and emotion. It is, indeed, a law of mind, which, though little heeded by metaphysical inquirers, seems to me far more important, and far more extensive, than many of those to which they have paid the greatest attention. Some of our most vivid emotions, —those of beauty, for example, as we shall afterwards find on our analysis of them,—derive their intensity chiefly from this circumstance; and many of the gay or sad illusions of our hopes and fears are only forms of this very illusion. To the superstitious, in the loneliness of twilight, many wild conceptions arise, that impress them with awe, perhaps, not with terror: but if, in the moment of such imaginations, their eye turn on any objects of indistinct outline, that give as it were a body to the phantasms of their own mind, the phantasms themselves, in blending with them, become immediately, with spectral reality, exter-

nal and terrifying objects of perception. How often, in gazing on a dim and fading fire, do we see, in the mixture of light and shade that plays before us, resemblances of well-known shapes, that grow more and more like as we continue to gaze on them! There is at first, in such a case, by the influence, perhaps, of the slightest possible similarity, the suggestion of some form that is familiar to us, which we incorporate, while we gaze, in the dim and shadowy film that flutters before us, till the whole seems one blended figure, with equal reality of what we conceive and what we truly see. The old Proverb, which says, that "As the fool thinketh so the bell clinketh," is a faithful statement of a physical phenomenon of the same kind. Nothing indeed, can exemplify the influence of which I speak, more strikingly than music. When both the air and the words of any song are very familiar to us, we scarcely can refrain from thinking, while the melody is performed by any instrument without a vocal accompaniment, that the very words are floating in the simple tones which we hear. In like manner, if any one beat the time of a particular air, on a table or other sounding body that is inca-

pable of giving the distinct tones, it may be difficult for a listener, however well acquainted with it, to discover the particular melody: but, as soon as it is named to him, he will immediately discover in the same sounds, not the time merely, but the very tones that are only conceptions of his own mind, which, as they harmonize with the sounds that are truly external, seem themselves also to be external, and to convert into music what before was unworthy of the name. I might add many other illustrations of the same principle: for in the constitution of the mind, as I have said, there is scarcely a principle of more extensive influence. But the examples which I have already adduced may be sufficient to shew the vivifying influence of perception on the conceptions that harmonize and unite with it, and to throw light also on the mode in which I conceive this vivifying effect to take place, by the diffusion of the felt reality of one part of a complex group to the other parts of it which are only imaginary.

VII. The various feelings which rise in the mind by the principle of Suggestion, are said to

form a *train* of thought, and are expressed by so many other phrases of simple *sequence*, that a person who has not been accustomed to consider the differences of meaning which the same words are often used to convey, may be led inadvertently to consider the internal train as in its order of sequence exactly similar to the onward figures of a procession, of which one vanishes from view, at the moment when another becomes visible. Such a notion, however, would be very inaccurate, as to the phenomena of Suggestion ; and since it is an error which might almost seem to be involved in the general opinions, or at least in the ordinary language of philosophers on the subject, it is the more necessary, on that account, to point it out distinctly.

If we look back with the slightest attention on the successive states of mind in any of our musings, we shall find, that a conception, after giving rise to some new conception, did not always cease to be itself a part of our continued consciousness. In the metaphysical sense of combination as applied to our feelings, the prior conception, in such a case, often remains, so as to co-exist with the conception which itself has in

duced, and may afterwards suggest other conceptions, or other feelings, with which it may co-exist in like manner, in a still more complex group. It is impossible, indeed, without such a widening co-existence of feelings, to account for some of the most ordinary phenomena of our thought. We compare, we chuse, in our internal plans; because different objects are together present to our conception. How many forms of beauty, for example, hover before the poet's eye, when he selects the most enchanting of them for the loveliness which he wishes to picture:—yet how little aid would he derive from all the splendid variety, if, instead of mingling and pausing before him even for a few moments, each were to flit away singly, in rapid succession, without affording any opportunity of wide comparison and choice!

VIII. When we speak of the phenomena of *Suggestion*, it is customary to say, as if in explanation of the rise of one conception after another, that it arises in consequence of prior *Association*. It is necessary, therefore, to understand accurately what the reference in this phrase implies:—and indeed it was chiefly with the view

avoiding any misconception with respect to its true meaning, that I have preferred, in treating of the phenomena, to speak of them simply as phenomena of Suggestion. It is in the suggestion itself, or, in other words, in the sequence of one conception or other internal affection of the mind, after another conception or other affection of the mind, that our whole experience of the tendency which we wish to express by either of the names, consists: and all that is anterior to the tendency of the mind at that particular moment, if we proceed on the supposed necessity of some earlier process of association, is a matter of conjecture only.

If the minute analysis, which I have ventured to offer as at least a probable one, be just, all suggestion, however diversified it may seem in the classifications which Mr HUME and other philosophers have made, is of feelings formerly proximate by feelings formerly proximate. In this view, accordingly, it may be of less consesequence, by which of the terms, Association or Suggestion, we express the tendency of the mind which we wish to designate; if by Association we mean nothing more than the fact of the mere

proximity itself on some former occasion, without any process of union at that time, distinct from the co-existence or immediate succession of the feelings themselves; and be sufficiently aware, that the tendency of the mind at the moment of the suggestion is the real cause of the rise of the subsequent feeling. It is a law of the mind, that feelings which were formerly proximate admit of reciprocal suggestion, when either of them has been primarily induced. But this is one law, or expression of one general tendency of the mind, not two distinct laws, expressive of two general tendencies:—in other words, there are not two mental processes different from the original state of the mere perception of two objects; by one of which processes the co-existing perceptions are primarily associated, and, by another process, the conceptions that correspond with them are afterwards suggested. The objects are originally perceived together; this state of mind is the result of a general law of perception. The one afterwards, on some new occasion, when perceived singly, awakens the conception of the other; the feeling thus induced is the result of a mental tendency, different from that on which

our mere perceptions, whether simple or complex, depend, but still only of one additional tendency. The different tendency must accordingly be expressed by a different name: and in the choice of a name, that is to express a law of the mind which operates at the moment of the sequence of one internal feeling after another, the word Suggestion seems to me preferable to a word that might convey, and in the ordinary language and reasoning of philosophers has very erroneously conveyed, the notion of another sort of connecting or associating process, of which we have no consciousness whatever.

There would be just reason, then, as I conceive, for the preference of the term which I have chosen, though all suggestion were indubitably, in every case, the suggestion of feelings formerly proximate. But how much more necessary does this preference become, if, with Mr Hume and other philosophers, we consider the suggestions of proximity as only one of many distinct orders of suggestions; in many of which, accordingly, the feelings that are said to be associated have never before existed together, till the moment of the suggestion itself!

If two conceptions, which never have co-existed before, be yet susceptible of mutual suggestion; and if, when the sequence takes place, we say that one of them was thus suggested, *because* it was associated with the other; we must either attach no meaning whatever to the word *associated*, or we must imply some mysterious operation of the mind on unexisting feelings, of which we are not conscious, and of which it would be impossible for us, according to the very terms of the supposition, to be conscious: since the consciousness would imply the co-existence or immediate proximity of two feelings at the moment of such a process, which yet, by supposition, were declared to have never been proximate.

So very evident does this appear to me, that I confess there are few errors in the philosophy of the mind, or at least in the phraseology of the philosophers who treat of it, that appear to me more wonderful, than the assertion of a previous association of ideas as the cause of their mutual suggestion; when it is yet maintained, that all suggestion is not reducible to former proximity, and that the association, therefore, whatever its nature as a connecting influence may be supposed

to be, must, in many cases, be a connexion of ideas that never were before in such a state of co-existence or succession, as to admit of their being combined.

Many objects may be perceived together. But, as I have before remarked, this is a process of perception only: and when they suggest each other afterwards, in the absence of one of the objects, the suggestion may indeed be a proof of a tendency of the mind distinct from perception, but not of two general tendencies distinct from it.

It would have been well, however, for the science of mind, if a single error had been all which this phraseology and reference involved. It was the source, or at least one of the chief sources, of many other errors, that have affected, in a greater or less degree, every arrangement that has been made of the mental phenomena. When all the phenomena of suggestion were ascribed to previous association, there must always have been a great difficulty felt in the reference to former association of many complex phenomena wholly different from any that had before existed in combination. It would seem the more necessary, therefore, in order to account for them, to have

recourse to various Faculties or general tendencies of the mind, different from those of Simple Suggestion itself; merely because the influence of the general suggesting principle had been improperly limited. For a fuller illustration of the fallacy, however, it will be necessary to review the supposed Faculties, with which, as I conceive, it has been the chief cause of encumbering our Systems of the Philosophy of the Mind.

CHAPTER III.

OF THE SUPPOSED FACULTIES TO WHICH THE PHENOMENA OF SIMPLE SUGGESTION HAVE BEEN ERRONEOUSLY REFERRED.

UNDER the term Simple Suggestion, I have, in the preceding Chapter, considered the tendency of the mind, after existing in the state which constitutes the perception or conception of one object, to exist immediately after in the state which constitutes the conception of some other object, in the absence of the external object of which the conception is thus internally awakened:—and I have shewn, that it is not necessary, in accounting for this suggestion, to suppose any anterior process of association, different from the

mere casual co-existence of the two corresponding perceptions, if suggestion be of proximate feelings only, or from the mere separate perception of each object, if the suggesting principle be of wider operation. To an error in this respect, I have said, we may trace the enlargement of our catalogues of the mental Faculties with many names, which are truly expressive of nothing more than the tendency of Simple Suggestion itself, modified in some cases by other co-existing feelings, the results of other general tendencies of the mind.

Let us proceed, then, to review these supposed Faculties, and to reduce to their elements the complex phenomena, which they have in some cases been employed to designate.

1. The Power of Conception, from its peculiar simplicity, may be considered in the first place.

The arrangement of certain phenomena under this supposed distinctive Power has arisen, directly and solely, from the error which I have pointed out, in the belief of a twofold process of Association and Suggestion.

If there were truly any process distinct from Perception itself, by which, when two objects are perceived together, some mysterious change takes place in them with relation to future suggestion, which renders the complex perception different from what it would otherwise have been, we might then understand the necessity of expressing this mysterious process by one phrase, and the subsequent suggestion by another. There would then truly be a Principle of Association, and also a Principle of Suggestion, that might be called in a more restricted sense a Power of Conception. But if, between the double perception and the actual suggestion that follows, there be no mysterious process whatever; and all that is known of the mind in this respect be its tendency at the moment of suggestion to exist in the state of a particular conception, in consequence of the former proximity of the corresponding perceptions, or of the resemblance or contrast, or any other relative quality of the objects; then is it evident, that we are not entitled to invent the names of two distinct Faculties, to account for one simple sequence. The Suggesting Principle is that

principle by which conceptions and certain other feelings arise; and could not be ranked as a general tendency of the mind, if there were nothing to be suggested. There are not a Power of Conception *and* a Power of Suggestion: but there is one general Power or tendency, which may be expressed by either of those words, or by the word Association, if it should seem preferable, that, in certain circumstances, gives rise to certain conceptions, and, as the source of every simple sequence in our trains of thought, is all that can be meant by any of those varieties of verbal designation. The supposed Power of Conception, when any particular conception arises in a train of thought, does not differ more from the Power or Principle of Suggestion, in consequence of the more general influence of which it has arisen, than the Power of uttering a single word differs generically from the Power of uttering whole sentences. Whether we speak of a Power of Conception, or of a Power of Association or Suggestion, we have regard to the rise of one simple feeling, and express only one simple tendency of the mind to exist in one state

after existing in another state; the only difference being, that when we use one of these words, *Conception*, we have chiefly in view the relation of this state of the mind to some external object formerly perceived, and that when we use either of the other words, *Suggestion* or *Association*, to express the very same internal sequence, we have chiefly in view the relation which the two parts of the simple sequence bear to each other, as directly antecedent and consequent.

II. The asserters of a Power of Conception, and of a Power of Association, are the asserters also of a third Faculty, distinct from both,—that of Memory.

In what does the *remembrance* of any thing differ from the mere *conception* of it? It differs in this respect merely, that, when we use the word Memory, we speak of a more complex feeling; not of a mere conception, but of a mere conception combined with a notion of time. This feeling of relation to the past is all that distinguishes it. If we take away the feeling of the relation of priority to the present moment, a remembrance becomes instantly a mere concep-

tion: if we combine this feeling of relation with any mere conception, it becomes instantly, to us who have combined the two feelings in one complex notion, a remembrance.

The complex phenomena, then, to which we give the name of Memory,—since they admit obviously of this very simple analysis,—may be considered as proofs of a tendency of the mind to exist in the state which we term a Conception, and of a tendency also to exist in the state which constitutes a Feeling of Relation. In the technical language which I have ventured to introduce, they are illustrative of the two mental capacities of Simple Suggestion and Relative Suggestion: but they do not prove any other tendency or Faculty of the mind, distinct from those general tendencies to which we owe all our conceptions and all our feelings of relation.

The illusion, with respect to a distinct Power of Memory, was probably aided, in some degree, by a defective analysis of the phenomena of reminiscence, when we endeavour to retrace events that are only partially or obscurely remembered by us. In such a case, the obscurity seems often to fly away before our very wish; as if all that

becomes then clearly visible had presented itself at our bidding. There is the appearance, accordingly, of a power which can be exercised by us over the trains of our thought; a power, therefore, which, as distinct from that of ordinary suggestion, when conceptions arise without any relation to our will, requires to be expressed by another name. It is very evident, however, that we have no such voluntary power as is supposed. We cannot will any particular conception, without that very conception already involved in our volition itself: and though, to avoid this evident inconsistency, philosophers have been accustomed to admit, that we have no direct power of this kind, but only an indirect power, by previously recalling other conceptions, which we know to have had a relation to the particular conception which we wish to renew; it is equally evident, that the indirect power, asserted, is only a more extensive form of the very direct power that is denied. If the primary conception cannot be willed by us, as little can the secondary conceptions, relating to it, be willed by us; since each secondary conception, if we consider it alone, must in that case be directly willed, and, as directly will-

ed, must involve the very absurdity which it was introduced in the hope of avoiding,—the absurdity of willing that into existence which must already exist before we can will it to exist.

The reminiscences that are said to be voluntary have nothing that distinguishes them from the ordinary sequences of conceptions in our trains of thought, except the accompanying vague desire, —an emotion that may blend with any of our conceptions, as any other emotion may blend with any conceptions or other feelings. The complex state of mind is not of difficult analysis. We know that some event took place at a particular time; though we have no distinct remembrance of it:— we wish to know it distinctly:—some of the circumstances connected with it, are remembered by us:—the conception of these, by the natural laws of suggestion, recalls other proximate circumstances:—if the circumstances already known recall rapidly the event which we are desirous of knowing, as, from its equal proximity, they may as readily recall it as any other proximate circumstance, our object is gained, and our wish of course ceases:—if they do not, our remaining wish, by its relation to them, keeps the circum-

stances of the time and place which we know, still permanently before us, till, in the wider and more varied suggestions to which they give rise, the event, perhaps, at last rises before us, or some new train of thought is induced, which puts an end to our wish itself. In all this process, there is no willing of any particular conceptions :—the conceptions rise unwilled ; and the effect of the desire is only, by its vividness and consequent permanence, to render more vivid and permanent the parts of the train of thought relating to it, that suggest of themselves many kindred conceptions, and among these ultimately some new conception, which either satisfies our wish, or calls us away to other musings or other wishes.

III. The next supposed Power of the mind which we have to examine, is one to which, if it truly were a distinct Faculty, we should have to consider ourselves indebted for some of our chief intellectual luxuries,—the Power of Imagination or Fancy,—which, in the endless variety of suggestions ascribed to it, embellishes social intercourse with its gayest charms, and in the products of Poetry, Eloquence and Romance, and of other Arts that do not use the arbitrary symbols

of written language, presents, in a permanent form, for the gratification of other Ages, the delightful images which it has embodied.

If we were to consider the new products only, without any analysis of the complex state or series of complex states of the mind, from which they have flowed, there can be little doubt, that what is termed the Faculty of Imagination, which presents the rich variety, would be regarded by us as truly a distinct Power of the mind. But it is only before a full analysis, that this opinion can be adopted. If we analyse the whole process of Imagination, we shall find it to admit very easily of reduction to simpler elements.

The word Imagination or Fancy is never employed, when we speak of the suggestion of former feelings, in the exact order and combination in which they before existed in the mind. The author of a poem is said to have exercised Imagination in the composition of his verses : but he who, after frequently perusing them, repeats them with perfect precision,—though presenting the same images and sentiments and diction,—is said to exercise only his Memory. Novelty of combination, therefore, at least relatively to the

individual who presents us with any product of art, is necessary, before we give the name of Imagination to the suggestions which he has embodied.

Let us consider, then, on what principle or principles of our mental constitution, such novelty of combination may be most reasonably supposed to depend.

In the first place, it is evident, that it cannot depend on our Will.

I have already shewn, in treating of the reminiscences which are said to be voluntary, the absurdity of the opinion, that we can will directly any conception; since, if we know what we will, the conception must be already a part of our consciousness:—and the argument is equally applicable to any new complex conception, as to the simplest conception that corresponds most exactly with the simplest of our former affections of Sense. To will the conception of a giant with a single eye in his forehead, must imply equally, in the state of mind that is supposed to form the volition itself, the previous conception of that very "monstrum horrendum, informe, ingens," as to will the simpler conception of any of our

friends, with the ordinary stature of the men around us, and with two eyes in the place where eyes are always found, must imply the previous conception of that very individual, whose familiar shape we are said in this way to recall.

What is thus true of a single complex image, must be equally true of any series of such images. The supposed power of Fancy, then, in its widest, as well as in its most limited applications, never can be justly used to express a voluntary command over the stores of our conceptions, by which they arrange themselves in groups according to our previous will. If we will any group, there must be something prior to our will, which has presented that very group as an object of our choice:—and if it exist already, it would surely be a very superfluous exercise of the Power ascribed to us, to occupy ourselves in giving existence to that which already exists.

There is no voluntary production, then, of any particular complex image, or series of complex images:—and yet there unquestionably arise in the inventive mind conceptions, different in their order and combination, from those which were before a part of its consciousness; and it is on

account of these new combinations alone, that we term the mind inventive. There is novelty, therefore; though the novelty may not admit of being willed.

To account for this novelty, it will be necessary to have in view some general remarks, which were made by me in treating of the phenomena of Simple Suggestion.

Whether the suggestions of analogy be direct, or indirect through the influence of some common emotion or other common feeling; it is not the less true, that there is a tendency to the suggestion of analogous conceptions by analogous perceptions or conceptions. This is one very important principle, of which we must not lose sight.

In the next place, I have shewn, that, in our trains of thought, there is not necessarily the rise of one conception after another in a sequence so very simple, that the one always fades away, in the very moment when the other is dawning upon us; but that conceptions mingle often with conceptions, the suggesting with the suggested, in series that sometimes widen into groups the most complex, by the successive suggestion of

of new images related to parts of the co-existing whole.

If these two general facts with regard to Simple Suggestion be admitted,—as they cannot fail to be, if we attend to our consciousness,—the novelty of combination, which is falsely ascribed to a specific Faculty, seems to be an inevitable result of them.

We think of the form of a horse in rapid motion:—its rapid motion suggests to us the analogous rapid motions of other animals:—we think of the wings of a bird; not losing, however, on that account, the primary conception of the form of a swift and beautiful horse, which suggested the swifter organs of flight of the winged animal:—the form of a horse and of the wings of a bird are thus mingled in one complex state of the mind:—we have the conception of Pegasus.

In all this there is nothing wonderful, because there is nothing that might not have been anticipated from the ordinary laws of Simple Suggestion. But there certainly would be something very wonderful, if we had voluntarily produced the combination of the elementary parts that

form together the conception of Pegasus; because then, as I have often repeated, the complex conception must have existed, when, by supposition, it had not begun to exist.

The suggestions of analogy, then, I conceive to be the chief cause of the novelty in what is termed Imagination. But a group of images, or a single complex conception, may be novel as a whole, by the absence of some customary parts, as well as by the addition of others. A procession of human figures, for example, without a head, would be as novel a combination of images, as a procession of human figures with two heads. When many images, therefore, co-exist in one very complex state of the mind; though the whole complexity may be a faithful copy of some equally complex perception, and therefore have no novelty in itself; if certain parts of that complexity fade away more rapidly than others, the residuary group may present an aspect as new, as if the whole had been one new product of the suggestions of analogy.

In like manner, if, during the complex conception of any group of objects, one of these suggest, in the ordinary manner, some other object

that may before have been perceived together with that particular object, but not with the other objects of the group; the whole group, to which this new object is added, will be diversified by that addition, so as to present a novelty of combination, which otherwise it could not have exhibited.

In these various ways, then, but especially by the influence of the tendency to suggestions of analogy, a new complex conception may arise, without the slightest necessity for inventing the name of some peculiar Faculty to account for it. It is the natural result of the general laws of Simple Suggestion, that act independently of our will; and cannot be the result of any voluntary creative Power, for reasons already stated.

But we carry on, it will be said, continuous plans of invention:—and how can this continuity be explained, without some specific Faculty, that gives unity and permanence to the trains of our thought?

A very simple analysis of our consciousness, during the supposed process of continued imagination, will be sufficient to shew, that the invention of such a Faculty is unnecessary for the

purpose that is supposed to require it. The unity and permanence are truly in the desire that is involved in the prosecution of a particular plan, and that, while it continues, gives a common relationship to the parts of the train of thought which are suggested by the remaining conception of the subject. But, with the exception of the permanent desire, and the primary conceptions involved in it, there is nothing more to be found in the process,—at least nothing more which can be considered as essential to the process,—than a sequence of conceptions after conceptions, such as takes place in the most ordinary train of thought, and intermingled feelings of relation such as arise in other ordinary cases of Relative Suggestion. The phenomena of Imagination, in short, are proofs of those general tendencies of the mind by which we are susceptible of Simple Suggestion, of Relative Suggestion, and of Desire, but not of any specific Faculty additional to these.

The effect of the combination of these, however, it may be necessary to explain a little more fully.

He who sits down studiously, with the wish of producing a beautiful series of imaginations on

any subject, must have a conception of that subject, and must have a desire of presenting, in many varied forms, the conceptions that are akin to it. If the conception of the particular subject were not accompanied with a desire of prosecuting it, it would soon, like any other momentary conception, pass away in some new train of thought, that had no peculiar relation to it. But desire is, by its very nature, essentially a vivid feeling; and therefore, while the conception of its object remains, and remains without full gratification, the desire is necessarily, from its peculiar vividness, a lasting one. There is in this case an exemplification of a very striking and beautiful reciprocal influence. The conception primarily excites the desire;—the desire, embodying as it were the conception, not merely renders it less fleeting, but communicates to it some portion of its own vividness. The conception of the subject is thus necessarily as lasting as the desire itself: and, when we occasionally wander from it in our reverie, there are other circumstances, that from time to time recall the original conception, and the accompanying desire, which had been broken or suspended. These circumstances,

though they may seem trifling when first mentioned, are truly of most important influence. I have already stated, in laying down the Secondary Laws of Simple Suggestion, that objects which have most recently co-existed in our perception or thought, are, when all other circumstances are the same, the most readily recalled in reciprocal sequences. Hence it happens, that the very sight of the room in which we sit, or of the desk or books or implements of writing before us, having recently, and for a considerable time co-existed with the conception of our plan, is sufficient, of itself, to recall us to our original subject, when all thought of it had been, perhaps, for a moment or two lost. The primary conception of our particular subject, then, is present to us, in circumstances that insure it a peculiar permanence; and, being present, it suggests some kindred conception, in the same way as any other conception, in the most fleeting train of thought, suggests any other kindred conception. When the new conception has arisen, we are struck, perhaps, with its relative fitness for our plan; and we retain it accordingly, and embody it in some permanent symbols:—or we are struck with its

relative unfitness, and reject it. The new image, again, suggests some other image, with respect to which the same choice or rejection takes place; and thus, successively, through the longest series of imaginations, the ordinary laws of Simple and Relative Suggestion produce their ordinary results; till a beautiful whole, perhaps, arise before us, in the complex magnificence of which we scarcely recognise the simple elements that have combined to produce it.

These simple elements, however, if we retrace our consciousness, are all that can be found in the process, which we express by a distinctive and prouder name. We find the conception of a particular subject, rendered more vivid and lasting by an accompanying desire;—the sequence of conception after conception;—a feeling of fitness or unfitness, varying according to the nature of the particular conception suggested. All that seems creative is nothing more than the existence of a certain previous desire, and the ordinary sequences of Suggestion. We do not will a single image to exist: for that is beyond our power. We do not will the images, that appear unfit with relation to our plan, to vanish from our

mind: for such a wish, by rendering them more lively, would tend only to give them greater permanence. But the images that appear to us fit for our purpose, remain longer, by the interest which that fitness gives to them, as objects which we wish to contemplate in all their varied aspects; and the images which appear unfit pass away with comparative rapidity, because, when felt to be unsuitable, they excite no desire of tracing their relations more fully.

IV. The phenomena of Habit are by Dr REID, in his Essays on the Active Powers, referred to an original Principle of the mind. "It seems," he says, "to be a part of our original constitution. Its end and use is evident; but we can assign no cause of it, but the will of Him who made us."

If, indeed, the physical influence of Suggestion or *Association* had been limited to our *Ideas*, in conformity with the ordinary phrase that expresses it, it might have been necessary to have recourse to another principle, to account for our habitual practical tendencies. But, when that unnecessary limitation, which is wholly un-

warranted by the phenomena of our consciousness, is removed, the growth of our practical habits seems as little mysterious as any of the other phenomena of Suggestion, that are equally modifications of the same simple principle.

The feeling which we term Desire, that is anterior to all voluntary action, is a mere state of the mind, like any of our perceptions or conceptions. It may co-exist, in the metaphysical sense of that term, with the perception or conception of various objects; as one perception or conception may co-exist with another; and may be recalled, therefore, in like manner, by the feeling that before co-existed with it.

It is this facility of renovation of former co-existing desires, which is the unfortunate source of all that is most dangerous in the circumstances of joyous seduction, that produced, perhaps, in moments of unreflecting hilarity, the primary desire which has afterwards been too readily recalled by them. There are few individuals in whom drunkenness, for example, is an early passion; but all love the excitement of gay society, that, even in periods of refinement, is often accompanied with a little over-indulgence in wine,

and that in a grosser state of manners is coupled almost constantly with a brutalizing excess in it, or in some other potation as poisonous and stupifying. In such circumstances, when the intoxicating beverage has been a frequent call to merriment, and when the sight of it, and the wishes and muscular movements necessary for partaking of it, have co-existed innumerable times, he who sees it again before him, sees again what has been accompanied with many enjoyments and desires; and it is as little wonderful, therefore, that it should recall the accompanying will to do what, in the same circumstances, had been repeatedly willed, as that it should recall the accompanying conceptions of the gay companions, who, on some recent occasion of mad inebriety, were seated with him at the same board.

It is the moral danger of this reciprocal suggesting influence of desire, and the perceptions or other feelings which before accompanied it,—an influence too much neglected, or misunderstood,—that requires the most vigilant watch of all who are desirous of shaking off the evil habits that have been oppressing them. We should avoid, indeed, every occasion of evil: but the

occasions of past evil are to be avoided by us with double care; not because they are in themselves more powerful inducements, but because the suggesting principle has given a fearful accession to the power which they originally possessed.

It is found, accordingly, by many individuals, who have sufficient virtue and wisdom to lament the passion that has been besotting them, and sufficient resolution to struggle to subdue it, a far easier effort to abandon wholly the use of the destructive beverage in which they have been accustomed to indulge, than to limit themselves to a more moderate use of it; because the moderate use of it brings again before their senses the circumstances of external perception, which had often before co-existed with their voluntary excess. They can be sufficiently sober in their wishes, to resist the knowledge that they have abundance of wine in their cellars: but their wishes themselves yield with instant facility, as they have yielded before on innumerable similar occasions, when the wine itself is sparkling on their board.

Such, as it appears to me, is the nature of habit, as far as the mere increasing tendencies of passion are concerned. It involves nothing pe-

culiar, but is an example of the same influence which gives occasion to all the phenomena of simple suggestion. We are not astonished that any one should repeat a poem with greater ease, after reading it more frequently; because we know it to be a law of the mind, that conceptions which have been most frequently proximate are most readily re-awakened: and, since there is no ground for the limitation of this law to our mere conceptions or ideas, we should be as little astonished, that wishes and preferences, and the voluntary movements consequent on these, should be recalled by perceptions or conceptions that have before co-existed with them, and should be recalled more readily, as the previous co-existence has been more frequent.

The increased tendency to certain actions is not the only phenomenon of habit. There is another phenomenon,—the increased facility in the performance of complicated movements,—which requires to be explained.

The explanation is, however, a very easy one. Every complicated movement, when we attempt to perform it for the first time, must be difficult; because it requires one particular degree of con-

traction of certain muscles: and we have no instinctive knowledge of this necessary contraction, and cannot derive any full information from experience, where the circumstances have never before been the same. We bring, therefore, in our first attempts, more or fewer muscles into play, or contract them more or less, than is necessary for the particular effect desired: and in consequence of the failure, which is generally from excess of movement, we are obliged to bring other muscles into action to preserve the body in that just equilibrium, which is necessary for continuing or renewing the effort.

An awkward dancer, in learning a new step, has often as great a waste of labour in what he overdoes, as in that part of the too complicated motion, which alone was necessary for the imitation required of him. All this unnecessary fatigue of course ceases, when a frequent repetition of the step has shewn him how it may be most easily produced. At every fresh trial, he makes a closer approach to the due point of contraction of the necessary muscles; exercising them less, because he knows better the exact degree of contraction that is requisite, and because he has less

evil of over exertion to repair: and it is thus a beautiful effect of the very endeavour to excel, at least where there is a quick perception of what is becoming, that the same influence which gives precision and simplicity to every movement, renders it less fatiguing to be graceful than to be awkward.

V. In these remarks on phenomena, ascribed erroneously to distinct Faculties of the mind, I flatter myself that I have shewn, how readily they admit of reduction to the influence of simpler Principles. But it must not be supposed, that, in objecting to the imperfect analysis which has led to such an arrangement, I object also to the words which have been used to express the phenomena. The words themselves may be as convenient for designating peculiar complex states of the mind, as if those states of the mind had not admitted of further analysis. Memory, Fancy, Habit, whatever we may think of them in other respects, must be allowed at least to express phenomena that are very remarkable; and all that is necessary, when we speak of them under those terms, is, that we should be fully aware of the na-

ture of the simple influence or concurring influences, of which they are all modifications. We never suppose, that when a chemist has demonstrated to us the similarity of the elementary atoms which form the beautiful products of our gardens, he objects on that account to the very convenient names, by which we distinguish one flower or fruit from another:—and what we do not suppose of the chemist, whose inquiries are directed to matter, we should as little suppose of the analytical inquirer into the beautiful combinations which diversify the field of our thought.

CHAPTER IV.

OF THE PHENOMENA OF RELATIVE SUGGESTION.

Our Intellectual states of mind have been distinguished by me as of two kinds,—Conceptions, and Feelings of Relation. Having considered, then, the laws of Suggestion with respect to our conceptions, we have now to proceed to the consideration of the latter of these orders of feelings.

We cannot long consider two or more objects, without being impressed with some relation which they seem to bear to each other: and this tendency to the suggestion of feelings of relation is equally true of our conceptions, or other internal affections of the mind, as of our affections of

sense; though, from the greater permanence of our perceptions when external objects are before us, they may naturally be supposed to give rise to a wider variety of such feelings of relation.

In conformity with our original view of the objects of physical inquiry, the variety of relations may be classed as Relations of Co-existence or Relations of Succession; according as, in the former case, they do not involve any notion of time, or as, in the latter case, they involve necessarily the notion which is expressed, in its double reference, by the words Before and After.

I. The Relations of Co-existence may be reduced under the following heads; Position,—Resemblance or Difference,—Proportion,—Degree,—Comprehensiveness, or the relation which a whole bears to the parts that are contained in it. When we say of a cottage, that it stands *on the slope of a hill*;—that it is very *like* the cottage beside it, but very *unlike* one that stands in the valley;—that its large sashed windows are out of *proportion* to the size of so diminutive a building;—that it is therefore *less* beautiful with

all its gaudy profusion of flowers, than the cottage in the valley, with its simple lattices, which seem to sparkle more brightly through the honeysuckle that is allowed to wreathe itself to their very edge;—and when, describing the interior of it also, we say that it *contains* only three small chambers,—in these few simple references, we have illustrated the whole possible variety of the Relations of Co-existence; which may be induced indeed by various objects, with various specific differences, but which, generically, must always be the same with these. Indeed, by an effort of subtlety, more violent perhaps than the phenomena warrant, it might be possible to reduce still more even this small number, and to bring, or force, the relations of proportion and degree under the more comprehensive relation of a whole and its various parts. But at least the number under which I have arranged them, as it appears to me to be in its order of distribution very easily intelligible, seems to me also sufficient for exhausting the whole phenomena, for which it was necessary to find a place and a name.

We look on two cottages:—we are not merely impressed with all their sensible qualities, with

which each separately, in perception, might have affected us exactly in the same manner as when we perceive them together; but we consider them relatively to each other or to other surrounding things. We think of them, therefore, in connexion with the place on which they stand; and we are impressed with their general resemblance or difference, with their various proportions, with their comparative degrees of beauty or convenience or other qualities, and with their comprehensiveness with regard to the number of parts which they respectively contain. The suggestion or instant sequence of any one of these feelings of relation, after the joint perception of the two objects, seems as little mysterious as the mere perception of the objects after the necessary previous organic change, or as any other sequence of feelings whatever: and if nothing had ever been written on the subject, the subject itself, as far as regards the mere simple feeling of relation in any particular suggestion, would scarcely seem to stand in need of any elucidation. Simple, however, as the nature of the feelings themselves appears to be, and little obscure as the circumstances truly are in which they originate; on no

subject has metaphysical warfare been so fiercely contentious: and, with respect to some of the relations, I may also say, on no subject have the brightest powers of the human intellect been exerted with so unprofitable a waste of labour, not in making truths that are clear seem clearer still, but in making truths seem to be errors and errors seem to be truths.

On account, then, of the misconceptions which have universally prevailed with respect to their nature and origin,—misconceptions that have arisen partly from a defective analysis of a very simple process, but still more from the mysterious darkness of the technical language that has been used to express it,—it will be necessary to give a fuller elucidation of some of the feelings of this Order, especially of those which I have designated as Relations of Resemblance, that are the source of all classification, and thus of all the general terms in which our reasonings are embodied.

II. When a resemblance is felt in some of the obvious qualities of external sense,—as when we look on a portrait or pictured landscape, and

think of the person or the scene that was meant to be represented by it;—no difficulty is felt by any one, in considering the relation. A portrait, or a landscape, involves no technical word of mystery; and the simple process of nature, therefore, in which feelings of resemblance arise in the mind after certain perceptions or conceptions, is all of which we think. But when we are called by philosophers to consider the circumstances on which classification is founded; though all that truly takes place in this process as essential to it, is a feeling of resemblance of object to object, less extensive indeed as to the number of similar circumstances than in a portrait or landscape, but still exactly of the same kind, when considered as a mere feeling or mental state; we seem immediately to see a thousand difficulties, because a thousand words of terrible sound start instantly on our conception. Yet when, on looking successively at a square, an oblong, a rhombus and a rhomboid, we class them all verbally as *four-sided* figures, we make as simple and as intelligible an affirmation, in stating the similarity of these figures in one common circumstance, as when we say of any portrait in our chamber that

it is like the friend for whom it was painted. The two affirmations express nothing more than a feeling of resemblance in certain respects; and, if we had never heard of the controversy in the Schools as to the nature of Universals, we should as little have suspected of the one affirmation as of the other, that it could give occasion to any fierce logical warfare. Still less could we have suspected, that philosophers who do not deny that we are capable of feeling the resemblance of a piece of coloured canvas to the living person whom it represents, are yet unwilling to allow that we feel the slightest general resemblance of a square, an oblong, a rhombus and a rhomboid; and insist accordingly that when we class these figures as *four-sided*, it is not because we have any common feeling of their similarity, or any intervening feeling or notion whatever, distinct from the perception of the separate figures, but because it is our arbitrary pleasure so to give the name.

The philosophers, to whose fundamental opinion on the subject of generalization I at present allude, are those who have been commonly distinguished by the title of Nominalists: and it is

indeed a very striking proof of the darkening effect of a long technical controversy, that an error which appears to me, I confess, notwithstanding my high respect for the talents of those who have maintained it, a very gross one, should yet have united in its support, with the exception of a very few names, the genius of the most eminent metaphysicians of our own and other countries.

The essence of this theory of generalization is, that we have no general notions, or general feelings of any kind, which lead us to class certain objects with certain other objects,—that there is nothing general but the mere names, or other symbols, which we employ,—and that in all the ascending gradation, therefore, of Species, Genus, Order and Class, the arrangement is constituted, as truly as it is defined by the mere word that expresses it, without any relative feeling of the mind as to any common circumstances of resemblance intermediate between the primary perception of the separate objects, and the verbal designation that ranks them together.

If this opinion had been maintained only by a single philosopher; though it might still have

seemed wonderful that even one individual could have supposed the whole generalizations of philosophy to be a mere play of insignificant words, in which objects were classed together under a single term, without the slightest reason, in any previous feeling of the mind, for being so classed, rather than any other objects the most discrepant; still the wonder might have been in a great measure lost in our knowledge of the wide possibilities of human error. But how much more wonderful does the opinion appear, when, even in our own country alone, we think of HOBBES, of BERKELEY, of HUME, of CAMPBELL, of STEWART, without including many other names less eminent, and remember that it is the opinion which they have all concurred in supporting.

It is not, however, a question of names of greater or less authority, which we have to consider, but a question of truth, that remains exactly the same, whether the names of greatest authority be opposed to it, or be accordant with it.

On this single point the whole force of the controversy rests; whether, in our primary arrangements of a number of separate objects in distinct classes, there was any previous general

feeling of agreement, that directed us in the arrangements of these individual objects, and that made the place which we assigned to them appear to us respectively more suitable than a different place; or whether there was no general feeling of relation whatever, but the mere perception of the separate objects, and the invention of a few general terms, under which any number of them might have been classed with as little feeling of unsuitableness as any other number of them. If we say, as, but for long abuse of language, I conceive we should all say instantly, that there is in every case a feeling of general agreement in some respects of the objects that are afterwards classed by us together under a general term, in consequence of that previous feeling, we admit that there are general notions or common relative feelings, which are subsequent to the perception of the separate objects; and that general terms are significant, only because they are expressive of these general notions of agreement or similarity; if we say, with the Nominalists, that we have no reason, in any felt relation or other feeling of our mind, for classing objects together, but that all are per-

fectly indifferent till we have, without any reason, invented a general word, which afterwards makes a verbal connexion where there was no connexion or agreement of any kind before, we must not expect that so strange an assertion is to be taken upon credit, but must appeal to the consciousness of mankind for the evidence which it bears in proof or in disproof of so very paradoxical a theory of one of the most important processes of human thought.

I am aware, that the Nominalist is not fond of exhibiting his doctrine in this minute analytical form;—and indeed if he did so exhibit it, I may almost venture to ssy, that he could not long remain a Nominalist:—but it is not the less true, that the whole force or the whole weakness of the doctrine is in the single principle which I have stated. If it be accordant with our consciousness that in the classification of objects there is no reason that leads us to invent originally, and afterwards to employ a general term with particular reference to one set of objects rather than to others,—that, for example, when we say of a primrose and a cowslip that they are *yellow*, and that a violet and a snowdrop are *not* yellow, there is no previous feeling of

agreement or disagreement which leads us to apply the term where the agreement is felt, and to withhold it where the disagreement is felt;—then is Nominalism true, because truth, with respect to any process of the mind, is only fidelity to consciousness. But if our consciousness tells us, that we never invent a general term without a reason, in some previous feeling of our mind, for inventing it,—that we never limit a general term without a reason for limiting it,—and never apply a general term to any new object, without a reason for applying it to that new object rather than to other objects to which we do not extend it;—then is nominalism not true, because in its statement of the process of generalization, it omits the very feeling in which all that is general in language must be confessed to have its source. The reason of the invention, limitation and application of a term must be a previous feeling of that mind which invents, limits, applies,—a feeling, therefore, intermediate between the perception of the separate objects and the use of the general word which is employed to comprehend them,—and a feeling that must be at least as general in its own relative bearings, as the word

that is only a symbol or a record of that intervening feeling itself.

When the controversy is thus stripped of the technical phraseology that had beclouded it, and submitted to the evidence of our consciousness as to a very simple part of a very simple process, it does not appear to admit of much discussion. If all theories on the subject could be forgotten, there are very few, I presume, who would have any hesitation in admitting that when we call a rose and a ruby *red*, an emerald and grass *green*, and a violet and sapphire *blue*, we give the same generic words of colour to different objects, because the different objects, however unlike they may be in all other respects, have been previously felt by us to agree in that common quality or relation to similar feelings of our mind, which the words are invented by us to express; and that we never should have invented such words as *redness*, *greenness*, *blueness*, expressive of these circumstances of felt agreement, if no previous feelings of agreement had followed the perception of the separate objects;—in short, that there never would have been general terms, if there never had been any thing general but terms.

I am aware, that when a simple analysis of any intellectual process which had before been complicated by the technical language of many opposite theories, has shewn the error of an opinion which seemed little erroneous when it was opposed only to other errors, it is often difficult to believe that it was in principle the very opinion which the result of such an analysis shews it to have been. In the present instance, I have no doubt that this difficulty will be felt by all who are little acquainted with the writings of the Nominalists; and that to such readers the attempt to prove that general terms are invented by us, only to express certain previous general feelings of the agreement of many objects, will appear very like an attempt to demonstrate what is too evident of itself to need to be demonstrated.

What may be almost self-evident, however, to minds that have not been taught to think in the language of a particular school, may require a much more laborious proof when it is addressed to minds that are to look on it through the foreign and cloudy medium of a language that has been used for expressing a very different system.

It may be necessary, therefore, to state with a little more detail, the nature of the generalizing process, and the total inadequacy of the theory which would account for the invention, limitation, and application of general terms, without any previous feelings of relation, or other general notions or general feelings of any sort.

We perceive two or more objects,—two human beings, for example, who have previously been distinguished by the names of George and James. If the word Man never had been invented; and if perception were the only state of which the mind was susceptible, with respect to these or other human beings; the word Man never could be invented: for the invention of the word Man, to express certain objects in distinction from certain other objects, implies the previous feeling of a relation which those objects bear to each other as similar in certain respects,—a relation which is not common to them with the objects excluded. There is, in the first place, then, the perception of the two or more objects classed together: in the second place, a feeling of a very different kind from perception, the relative or common feeling of their resemblance in certain re-

spects; without which previous intervening feeling of resemblance in certain common properties, we should as little have classed George and James under the single word Man, as we should have used the word Man, to comprehend George, and a lake and a forest, or any other combination of objects as unlike. It is as truly the previous common feeling of their relation of similarity which gives rise to the common appellative that expresses any number of objects, as it is the perception of each separate object that gives rise to the name by which its separate existence is expressed: and it would not be more absurd to say, that George and James were nobody till the words George and James were invented, than to say that there was no common feeling of the resemblance of George and James, no notion of their agreement in certain respects, till both were denominated Men. Why do we never apply the term Man to a rock or a tree that is new to us, as we apply it to a stranger whom we have never seen before? Should we think that we had given a very philosophic account of the difference, if we were to say that we apply the term to the stranger because we choose so to apply it, and do

not apply it to inorganic things, because such an application of it is not according to our will? Our answer, if any one were to put such a question to us, would surely be of a different kind; —that the word Man was originally employed by us to express the individuals who agreed in certain common qualities, or, in other words, who agreed in exciting in us, when we contemplated them together, a certain relative feeling of their similarity in certain respects;—that this common notion or general relative feeling of similarity, as it led to the invention and original use of the general term Man, is the standard also according to which we afterwards extend the term to new objects,—that we apply it, therefore, to the stranger, because, when considered together with other individuals whom we have before included under it, he excites the same feeling of a common relation which they mutually excited; and that we do not apply it to a rock and a tree, because they do not excite the common feeling of similarity or agreement in certain respects which the word Man was invented to denote. This explanation, which is in perfect conformity with the process that truly takes place in generalizing, is

a very intelligible one: but this explanation the Nominalist cannot give, because it proceeds on the admission of those very general feelings, which it is the great principle of his system to deny. According to him there is nothing general but the mere names themselves, which are used to connect objects together by a tie that is purely verbal; and why they are used to connect by that verbal tie any one set of objects rather than any other set of objects, he cannot assign any reason whatever, since the assignment of a reason would be the acknowledgment of some previous intervening feeling of the mind, as general as the objects which it marked out to be distinguished by the general word, and therefore as general as the word that only indicated an internal distinction previously made. On the strict principles of his system, without which his system is nothing, the only reason which a nominalist can give for his application of the term Man to the individuals James and George, rather than to the individual James and to St Paul's Cathedral, is the very unphilosophic one, that he has an unlimited command over the insignificant words which he invents, and has chosen to apply the

term Man to two of these objects, and not to the third, as he might equally have applied it, if he had so chosen, to the second and third and not to the first.

It seems scarcely possible to attend for a moment to that which passes in our mind in the process of generalizing, without perceiving that it is in its widest sense a threefold process; and that the part of it which the nominalist omits is the most important of the whole, because it is equally the reason for the primary arrangement, and for the subsequent distribution of other objects, according to their conformity with it or with other general feelings, under the same or different appellatives. We perceive two or more objects together; this is one stage of the process:—we are struck with their similarity or agreement in certain respects; this feeling of relation is the second stage of the process:—we invent a common appellative to express the objects that agree in exciting the same relative feeling; this invention of a general term, to express, with equal generality, the previous general feeling is the third stage of the process. Perceptions, Feelings of Relation, Names;—these are

the three essentials of every classification that is expressed in words. But to the real internal process, as far as the distinctive or classifying feeling is concerned, the first two of the three are all that can be considered as essential. With them, the internal generalization is finished and, far from being necessary to constitute the genus, the general term is only a proof or a symbol or a mood of a generalization that has previously been made, and never can be more general in its comprehensiveness, than the general feeling of relation which preceded it. The value of the general term, however, is not to be despised on that account; on the contrary, it is that very circumstance which gives it all its value. It is useful exactly because it is a faithful record of what has been previously felt by us; and if it were representative of no feeling whatever, would be of as little use as any other unintelligible word, of the most barbarous jargon. The advantage of general terms, indeed, it is impossible to estimate too highly. They fix in language what, without verbal or other symbols, would pass away rapidly as a momentary feeling of relation; thus enabling us to recur with pre-

cision to the results of our previous generalizations, and to advance with safety, therefore, in the progress begun, either to generalizations still more minute and comprehensive, or to reasonings on the relations previously felt; and at the same time enabling us, by the exactness of our verbal definitions, to hold communion with other minds on the finest and most shadowy relations that have been felt by us, as readily as on the individual objects that affect our external sense, and thus to profit by the results of the reasonings of all mankind, as we add our own small and almost imperceptible contribution to the magnificent and ever-increasing store of the wisdom of every age.

That we can reason internally without the use of general words, the very invention of those general words is, I conceive, a sufficient proof; and though the nominalist may be unwilling to allow that other animals reason, he surely will not extend his scepticism to the reasonings of the uninstructed deaf and dumb of our own species: yet these alone might be sufficient to convince him that there must be general feelings of relation as well as general terms: though at the

same time, as might have been anticipated in such circumstances, they shew how very scanty the general knowledge of any individual must be, who has no mode of fixing permanently the few relations which he has himself discovered, and no mode of becoming acquainted with the far wider number of relations discovered by others, which the use of language has made to a certain degree familiar to the most ignorant of the community in which he lives.

When we have analysed accurately the process of generalization, there is no more difficulty in understanding how general terms are limited, than in understanding how they were originally invented; because every application of a general term to new objects proceeds, as I have already shewn, on the very same feeling of similarity in certain respects which led to the original invention of it. We see a goat and a dog;—we are struck with a certain general resemblance of the two animals;—we express this feeling of relation, with reference to the objects that excite it, by the word Quadruped:—and when, on seeing a sheep, or a hog, we apply to it the same term, we make this reference, because the same feeling

of resemblance in the same common circumstances has again been excited in our mind. Whatever it may be that excites this common feeling, to it we apply the same common term; and whatever it may be that does not excite this common feeling, to it we do not apply the same common term. When a general feeling of relation, then, is admitted to intervene between the perception of objects and the employment of general terms, there is no difficulty in the theory either of the use of such terms or of the withholding of them. But the circumstances, as we have seen, are very different, when no such intervening states of mind are allowed; and all that constitutes generalization is said to be the perception of the individual objects and the arbitrary classing of them under certain terms. There must then be very great difficulty, in limiting the application of every term, at least with respect to new objects that have not been formally enumerated as belonging to a particular class; or rather, I should say the limitation, in such circumstances, is impossible, without the assumption of those very general feelings which the nominalist professedly denies, but without which it is beyond

his power to proceed a single step. Accordingly, it is amusing to find, how ready he always is, when the difficulty presents itself, to leap over to the other side, without any seeming consciousness that he has changed his footing, and to avail himself, as often as it may be necessary, of all those notions of sorts and species, the very supposition of which is inconsistent with his system. "An idea," says BERKELEY, "which, considered in itself, is particular, becomes general by being made to represent or stand for all other particular ideas of the *same sort*." But if, on his own principles, we cannot have any notion of a sort at all, how are we to know what particular ideas are of the same sort and what are of a different sort; and what possible measure have we therefore for determining the extent and the limits of the representation of which he speaks? The nominalist knows what an inch, a foot, a yard, are; but he does not know, and on his own principles cannot know, what a line is. He knows various figures of three sides of certain dimensions, and of various degrees of inclination of those sides; but he does not and cannot know what sides and angles are, except as the parti-

cular dimensions and degrees of inclination that have been measured by him, or what a triangle is with any greater generality than the particular figures which he has contemplated. Every property which he discovers, therefore, must be a particular property of certain particular figures that were in his mind during the demonstration; and a universal truth of all triangles must to him be as unintelligible a combination of words as the eternity of a quarter of an hour or the immensity of a quarter of an inch.

In Dr CAMPBELL'S illustrations of the power of signs in his very ingenious work on the Philosophy of Rhetoric, he adopts and defends the doctrine of the general representative power of particular ideas; making of course the same inconsistent assumptions which BERKELEY makes, and which every nominalist must make, of those general notions of Orders, Sorts, or Kinds, which his argument would lead us to deny. "When a geometrician," he says, "makes a diagram with chalk upon a board, and from it demonstrates some property of a straight-lined figure, no spectator ever imagines, that he is demonstrating a property of nothing else but that individual

white figure of five inches long, which is before him. Every one is satisfied that he is demonstrating a property *of all that order*, whether more or less extensive, of which it is both an example and a sign; *all the order being understood to agree with it in certain characters, however different in other respects.*" There can be no question, that every one is satisfied, as Dr CAMPBELL truly says, that the demonstration extends to a whole order of figures: and the reason of this is, that the mind is capable, by the medium of its feelings of resemblance, of forming a general notion of an order of figures: for it really is not easy to be understood, how the mind should extend any demonstration to a whole order of figures, and to that order only, of which order itself it is said to be incapable of any notion. A particular figure, we are told, is representative of other particular figures "that agree with it in certain characters." But what are these common or general characters? If we do not previously understand what they are, we cannot understand the very representation asserted: and if we do know what the common characters are, we have already that ge-

neral notion which renders the supposed representation unnecessary. It would not be more absurd to say, that, with the most unerring knowledge of the whole letters of the alphabet, we yet require to have constantly before us some particular letter, A or Z, to represent them to us, without which we could not know whether there truly be an alphabet or series of letters; than to say that, with a knowledge of all the common characters in which a whole order of figures agree, we yet require some particular figure of the order to represent to us the very characters which must have been fully known to us before we could distinguish whether the representative figure were itself a figure of the order.

In thus pointing out the inconsistencies and other defects of the doctrine of Nominalism, I trust I shall not be considered as supposing that an error so little accordant with our consciousness or with the principles of just reasoning, could have been the error of the many great minds that have adopted it; if there had not been circumstances which prepared the way for the too easy admission of it, and which lessened, therefore, relatively, the amount of error to those who

considered the doctrine only through the medium of those circumstances.

The first circumstance, I may remark, which favoured powerfully the admission of it, was the very gross absurdity of the doctrine to which it was primarily opposed. In a sketch like the present, there is not room to enter into a history of the ancient opinions as to Universals. It is sufficient to know, that for a long period of the Scholastic Philosophy, the doctrine of Realism had undisputed sway; a doctrine that was in perfect accordance with the general theory of perception of the time; as it supposed the objects of the understanding in generalizing to be certain universal forms or species, distinct both from the mind and from external things, in the same manner as sensible forms or species, equally distinct from the mind and from external things, were supposed to be the real objects of perception. On a doctrine which first dared to oppose so egregious an error as this, we naturally look with more favour, on account of the very absurdities opposed by it: and even now, if we had no choice but of rigid nominalism or of the old universal *a parte rei*, the nominalism, however in-

adequate to explain the phenomena, might deserve to be preferred as at least the simpler error of the two. This relative merit, however, should be laid wholly out of account, when a better analysis has shewn the real nature of the generalizing process: and yet I have no doubt that the comparative praise which might, perhaps, have been justly claimed by nominalism in the darker Ages of Dialectics, is still in some measure extended to it in our own Age; and that we still continue to think more favourably of it, because it still presents itself to our conception, together with the Realism which it originally combated.

Another and a much more powerful cause of the too ready acquiescence in Nominalism, is to be found in the imperfect analysis and the very erroneous language of those who, in the recent Ages of Philosophy, have been the only remaining combatants of that system. After the extinction of Realism, all philosophers who have not been Nominalists, have been of the Sect of Conceptualists, defenders of what have been termed General Ideas or General Conceptions. Now, as these terms involve, in the first place, a

false arrangement of the phenomena of Generalization, and lead also unavoidably to innumerable inconsistencies and errors, it is not wonderful that nominalism should have profited in its general influence, by all that was faulty in the only system opposed to it.

In the view which I have taken of the generalizing process, it is not in an *idea* or *conception* that I find the source of our general terms: it is in a feeling of a very different kind, *the relation of similarity*, which is excited in common by all the objects of the class, that receive the verbal designation which marks our previous internal arrangement of them, in consequence only of that common feeling which they all excite. We have no *general idea of a triangle;* for a Relation is as little an Idea, and admits as little of individual representation as an Emotion. It is a feeling of its own kind, of which it is the very nature to extend always to more objects than one, and which may extend in its general bearings to innumerable objects,—certainly to all the objects, that, when contemplated together, agree in exciting the same common feeling. Though we have no general idea of *a triangle*, then, we have a general notion of the

common nature of *triangles*, or, in other words, have a general feeling of a relation of similarity of all the figures to which, on account of that felt resemblance alone, we have given the common name,—a name that is general, therefore, only because it expresses a generality previously felt, and that never can be more general than the previous general feeling. But LOCKE, though, with a very little more refinement of analysis, he could scarcely have failed to discover that his *general idea* was truly a *general feeling of relation* only, had unfortunately made a different arrangement of the feeling, and an arrangement which necessarily subjected it to various misapprehensions. A Conception or Idea appears to be something which we may imagine at least to be embodied before us; and accordingly, taking our general relative feeling of the resemblance in certain common properties of the figures termed Triangles to be itself the idea of a triangle, the author of the Essay on the Human Understanding was led to his unfortunate description of this very strange Idea,—a description which supplied a subject of easy ridicule to the wits of a very witty period, and was indeed sufficiently

worthy of all the ridicule which it received. In the principles of nominalism itself also, when the doctrine is examined with rigid analysis, there is much that might be represented in a ludicrous light, but a ludicrousness that must be preceded by analysis is not a ludicrousness that is readily felt; while all that was ridiculous in Mr LOCKE's absurd description, presented itself so obviously, that it was sufficient to deter an ordinary intellect from endeavouring to estimate how much truth was mixed with the absurdity. It was enough that it was ridiculous: and, because it was thus ridiculous, the nominalism opposed to it seemed, by the influence of a very common prejudice of our intellectual nature, to be the more reasonable on that account. Had the examiners of Mr LOCKE's language considered the general spirit of his reasoning, they would have found, not indeed a proof that we have a general idea of a triangle or any other general idea that can be considered as imaging in a single figure a number of inconsistent particulars, but at least a proof that the generalizing process involves more than the mere perception of a number of particular objects and the arbi-

trary coinage of a technical nomenclature: and perhaps a little reflection on the circumstances of the process might have led to that clearer analysis, in which, as I flatter myself, I have shewn both the indispensableness of some general feeling to account for the invention and application of every general term, and the nature of the general feeling itself in relation to the kindred phenomena with which it should be arranged.

When it is shewn that this feeling, which alone gives generality, or any meaning whatever to the general terms employed by us, is a feeling of mere relation,—a feeling of agreement or similarity excited by certain objects when contemplated by us together,—a difficulty is obviated, that must have been felt very strongly as long as the general feeling was supposed to be a conception or idea, and that must have tended in the same proportion to favour the influence of nominalism. There is no question, that we may carry on a process of reasoning without any definite conception of a precise object; because reasoning is the developement of relations, and relations may be expressed in terms that are wholly general, and be hypothetical and contingent as

well as real. We may speak of all Xs or Ys, as well as of all mountains or rivers; and may extend, therefore, with an equal feeling of truth, to every separate X or Y what has been predicated of the whole class represented by either of those letters, as we extend to Snowdon or the Thames what has been previously affirmed to be true of every mountain or river. In like manner, in the various applications of the Algebraic Calculus, all that is present to the mind till the conclusion is evolved, is a number of relations of signs that, independently of those relations, would be wholly insignificant. Now, though, in the view which I have taken of the generalizing process, there is no mystery whatever in this continued developement of new relative feelings; because relations, as I have shewn, are truly all that can be considered as general in the feelings which general terms are employed with a co-extensive generality to express; there would not be the same facility of comprehending the nature of such reasoning, while it was supposed that in generalizing, and consequently in reasoning which must always be conversant with generalities, a conception or idea must be continually

present to the mind, as often as any general term is used with a full understanding of its meaning. The processes of algebraic calculation, that seemed to evolve only signs and the relations of signs, as they afforded no such conception or idea, could not fail to appear to the nominalist, while he thought only of the conceptualism opposed to him, to be strongly corroborative of the soundness of his doctrine: though he ought to have reflected, that, as signs alone in indiscriminate confusion never could constitute reasoning, and as the common relations of these signs were truly what the reasoning was employed to evolve in a certain regular order, even the most abstract calculation was itself a sufficient proof of the necessity of those very general feelings, which it was very falsely supposed by him to disprove.

It appears, then, I trust, sufficiently manifest, that the generalizing process is either twofold, as it is simply internal in the mind, or threefold, as the internal feeling of relation is expressed by a word of corresponding generality. We perceive certain objects together;—we are impressed with a common feeling of their agree-

ment in certain respects;—we use a general name to express all the objects, and only those objects, which excite the same relative feeling of similarity. Hence it happens, that there may be a continued progress in generalizing, with new general terms at every stage of the progress, according as the feeling of relation extends to fewer and fewer circumstances. John,—Man,—Animal,—Being,—are all, with the exception of the first, general terms: and each, as we advance, is applicable to a wider and wider number of individuals; because the feeling of resemblance is less and less varied in extent at every stage of the progress, and therefore admits of being induced by a wider number of objects.

The different systems with respect to generalization have been expressed technically by different words. There have been Realists, Nominalists, Conceptualists. It is perhaps convenient to have a single word for expressing thus briefly a general doctrine; and if, therefore, in conformity with the spirit of the same quaint phraseology, I were to express in some analo-

gous term my own opinions on the subject, it is as a Relationist that I would technically distinguish myself.

III. *

P. Neill, Printer.