



The Laws of Mind

John Stuart Mill

§ 1. What the Mind is, as well as what Matter is, or any other question respecting Things in themselves, as distinguished from their sensible manifestations, it would be foreign to the purposes of this treatise to consider. Here, as throughout our inquiry, we shall keep clear of all speculations respecting the mind's own nature, and shall understand by the laws of mind those of mental Phenomena; of the various feelings or states of consciousness of sentient beings. These, according to the classification we have uniformly followed, consist of Thoughts, Emotions, Volitions, and Sensations; the last being as truly states of Mind as the three former. It is usual, indeed, to speak of sensations as states of body, not of mind. But this is the common confusion, of giving one and the same name to a phenomenon and to the approximate cause or conditions of the phenomenon. The immediate antecedent of a sensation is a state of body, but the sensation itself is a state of mind. If the word Mind means any thing, it means that which feels. Whatever opinion we hold respecting the fundamental identity or diversity of matter and mind, in any case the distinction between mental and physical facts, between the internal and the external world, will always remain, as a matter of classification; and in that classification, sensations, like all other feelings, must be ranked as mental phenomena. The mechanism of their production, both in the body itself and in what is called outward nature, is all that can with any propriety be classed as physical.

The phenomena of mind, then, are the various feelings of our nature, both those improperly called physical and those peculiarly designated as mental; and by the laws of mind, I mean the laws according to which those feelings generate one another.

§ 2. All states of mind are immediately caused either by other states of mind, or by states of body. When a state of mind is produced by a state of mind, I call the law concerned in the case a law of Mind. When a state of mind is produced directly by a state of body, the law is a law of Body, and belongs to physical science.

With regard to those states of mind which are called sensations, all are agreed that these have for their immediate antecedents, states of body. Every sensation has for its proximate cause some affection of the portion of our frame called the nervous system, whether this affection originates in the action of some external object, or in some pathological condition of the nervous organization itself. The laws of this portion of our nature—the varieties of our sensations, and the physical conditions on which they proximately depend—manifestly belong to the province of Physiology.

Whether the remainder of our mental states are similarly dependent on physical conditions, is one of the vexatæ questiones in the science of human nature. It is still disputed whether our thoughts, emotions, and volitions are generated through the intervention of material mechanism; whether we have organs of thought and of emotion, in the same sense in which we have organs of sensation. Many eminent physiologists hold the affirmative. These contend that a thought (for example) is as much the result of nervous agency, as a sensation; that some particular state of our nervous system, in particular of that central portion of it called the brain, invariably precedes, and is presupposed by, every state of our consciousness. According to this theory, one state of mind is never really produced by another: all are produced by states of body. When one thought seems to call up another by association, it is not really a thought which recalls a

thought; the association did not exist between the two thoughts, but between the two states of the brain or nerves which preceded the thoughts: one of those states recalls the other, each being attended in its passage by the particular state of consciousness which is consequent on it. On this theory the uniformities of succession among states of mind would be mere derivative uniformities, resulting from the laws of succession of the bodily states which cause them. There would be no original mental laws, no Laws of Mind in the sense in which I use the term, at all; and mental science would be a mere branch, though the highest and most recondite branch, of the science of physiology. M. Comte, accordingly, claims the scientific cognizance of moral and intellectual phenomena exclusively for physiologists; and not only denies to Psychology, or Mental Philosophy properly so called, the character of a science, but places it, in the chimerical nature of its objects and pretensions, almost on a par with astrology.

But, after all has been said which can be said, it remains incontestable that there exist uniformities of succession among states of mind, and that these can be ascertained by observation and experiment. Further, that every mental state has a nervous state for its immediate antecedent and proximate cause, though extremely probable, can not hitherto be said to be proved, in the conclusive manner in which this can be proved of sensations; and even were it certain, yet every one must admit that we are wholly ignorant of the characteristics of these nervous states; we know not, and at present have no means of knowing, in what respect one of them differs from another; and our only mode of studying their successions or co-existences must be by observing the successions and co-existences of the mental states, of which they are supposed to be the generators or causes. The successions, therefore, which obtain among mental phenomena, do not admit of being deduced from the physiological laws of our nervous organization; and all real knowledge of them must continue, for a long time at least, if not always, to be sought in the direct study, by observation and experiment, of the mental successions themselves. Since, therefore, the order of our mental phenomena must be studied in those phenomena, and not inferred from the laws of any phenomena more general, there is a distinct and separate Science of Mind.

The relations, indeed, of that science to the science of physiology must never be overlooked or undervalued. It must by no means be forgotten that the laws of mind may be derivative laws resulting from laws of animal life, and that their truth, therefore, may ultimately depend on physical conditions; and the influence of physiological states or physiological changes in altering or counteracting the mental successions, is one of the most important departments of psychological study. But, on the other hand, to reject the resource of psychological analysis, and construct the theory of the mind solely on such data as physiology at present affords, seems to me as great an error in principle, and an even more serious one in practice. Imperfect as is the science of mind, I do not scruple to affirm that it is in a considerably more advanced state than the portion of physiology which corresponds to it; and to discard the former for the latter appears, to me an infringement of the true canons of inductive philosophy, which must produce, and which does produce, erroneous conclusions in some very important departments of the science of human nature.

§ 3. The subject, then, of Psychology is the uniformities of succession, the laws, whether ultimate or derivative, according to which one mental state succeeds another; is caused by, or at least, is caused to follow, another. Of these laws some are general, others more special. The following are examples of the most general laws:

First. Whenever any state of consciousness has once been excited in us, no matter by what cause, an inferior degree of the same state of consciousness, a state of consciousness resembling the former, but inferior in intensity, is capable of being reproduced in us, without the presence of any such cause as excited it at first. Thus, if we have once seen or touched an object, we can afterward think of the object though it be absent from our sight or from our touch. If we have been joyful or grieved at some event, we can think of or remember our past joy or grief, though no new event of a happy or painful nature has taken place. When a poet has put together a mental picture of an imaginary object, a Castle of Indolence, a Una, or a Hamlet, he can afterward think of the ideal object he has created, without any fresh act of intellectual

combination. This law is expressed by saying, in the language of Hume, that every mental impression has its idea.

Secondly. These ideas, or secondary mental states, are excited by our impressions, or by other ideas, according to certain laws which are called Laws of Association. Of these laws the first is, that similar ideas tend to excite one another. The second is, that when two impressions have been frequently experienced (or even thought of) either simultaneously or in immediate succession, then whenever one of these impressions, or the idea of it, recurs, it tends to excite the idea of the other. The third law is, that greater intensity in either or both of the impressions is equivalent, in rendering them excitable by one another, to a greater frequency of conjunction. These are the laws of ideas, on which I shall not enlarge in this place, but refer the reader to works professedly psychological, in particular to Mr. James Mill's *Analysis of the Phenomena of the Human Mind*, where the principal laws of association, along with many of their applications, are copiously exemplified, and with a masterly hand.

These simple or elementary Laws of Mind have been ascertained by the ordinary methods of experimental inquiry; nor could they have been ascertained in any other manner. But a certain number of elementary laws having thus been obtained, it is a fair subject of scientific inquiry how far those laws can be made to go in explaining the actual phenomena. It is obvious that complex laws of thought and feeling not only may, but must, be generated from these simple laws. And it is to be remarked, that the case is not always one of Composition of Causes: the effect of concurring causes is not always precisely the sum of the effects of those causes when separate, nor even always an effect of the same kind with them. Reverting to the distinction which occupies so prominent a place in the theory of induction, the laws of the phenomena of mind are sometimes analogous to mechanical, but sometimes also to chemical laws. When many impressions or ideas are operating in the mind together, there sometimes takes place a process of a similar kind to chemical combination. When impressions have been so often experienced in conjunction, that each of them calls up readily and instantaneously the ideas of the whole group, those ideas sometimes melt and coalesce into one another, and appear not several ideas, but one; in the same manner as, when the seven prismatic colors are presented to the eye in rapid succession, the sensation produced is that of white. But as in this last case it is correct to say that the seven colors when they rapidly follow one another generate white, but not that they actually are white; so it appears to me that the Complex Idea, formed by the blending together of several simpler ones, should, when it really appears simple (that is, when the separate elements are not consciously distinguishable in it), be said to result from, or be generated by, the simple ideas, not to consist of them. Our idea of an orange really consists of the simple ideas of a certain color, a certain form, a certain taste and smell, etc., because we can, by interrogating our consciousness, perceive all these elements in the idea. [pg 593] But we can not perceive, in so apparently simple a feeling as our perception of the shape of an object by the eye, all that multitude of ideas derived from other senses, without which it is well ascertained that no such visual perception would ever have had existence; nor, in our idea of Extension, can we discover those elementary ideas of resistance, derived from our muscular frame, in which it has been conclusively shown that the idea originates. These, therefore, are cases of mental chemistry; in which it is proper to say that the simple ideas generate, rather than that they compose, the complex ones.

With respect to all the other constituents of the mind, its beliefs, its abstruser conceptions, its sentiments, emotions, and volitions, there are some (among whom are Hartley and the author of the *Analysis*) who think that the whole of these are generated from simple ideas of sensation, by a chemistry similar to that which we have just exemplified. These philosophers have made out a great part of their case, but I am not satisfied that they have established the whole of it. They have shown that there is such a thing as mental chemistry; that the heterogeneous nature of a feeling A, considered in relation to B and C, is no conclusive argument against its being generated from B and C. Having proved this, they proceed to show, that where A is found, B and C were, or may have been present, and why, therefore, they ask, should not A have been generated from B and C? But even if this evidence were carried to the highest degree of

completeness which it admits of; if it were shown (which hitherto it has not, in all cases, been) that certain groups of associated ideas not only might have been, but actually were, present whenever the more recondite mental feeling was experienced; this would amount only to the Method of Agreement, and could not prove causation until confirmed by the more conclusive evidence of the Method of Difference. If the question be whether Belief is a mere case of close association of ideas, it would be necessary to examine experimentally if it be true that any ideas whatever, provided they are associated with the required degree of closeness, give rise to belief. If the inquiry be into the origin of moral feelings, the feeling for example of moral reprobation, it is necessary to compare all the varieties of actions or states of mind which are ever morally disapproved, and see whether in all these cases it can be shown, or reasonably surmised, that the action or state of mind had become connected by association, in the disapproving mind, with some particular class of hateful or disgusting ideas; and the method employed is, thus far, that of Agreement. But this is not enough. Supposing this proved, we must try further by the Method of Difference, whether this particular kind of hateful or disgusting ideas, when it becomes associated with an action previously indifferent, will render that action a subject of moral disapproval. If this question can be answered in the affirmative, it is shown to be a law of the human mind, that an association of that particular description is the generating cause of moral reprobation. That all this is the case has been rendered extremely probable, but the experiments have not been tried with the degree of precision necessary for a complete and absolutely conclusive induction.

It is further to be remembered, that even if all which this theory of [pg 594] mental phenomena contends for could be proved, we should not be the more enabled to resolve the laws of the more complex feelings into those of the simpler ones. The generation of one class of mental phenomena from another, whenever it can be made out, is a highly interesting fact in psychological chemistry; but it no more supersedes the necessity of an experimental study of the generated phenomenon, than a knowledge of the properties of oxygen and sulphur enables us to deduce those of sulphuric acid without specific observation and experiment. Whatever, therefore, may be the final issue of the attempt to account for the origin of our judgments, our desires, or our volitions, from simpler mental phenomena, it is not the less imperative to ascertain the sequences of the complex phenomena themselves, by special study in conformity to the canons of Induction. Thus, in respect to Belief, psychologists will always have to inquire what beliefs we have by direct consciousness, and according to what laws one belief produces another; what are the laws in virtue of which one thing is recognized by the mind, either rightly or erroneously, as evidence of another thing. In regard to Desire, they will have to examine what objects we desire naturally, and by what causes we are made to desire things originally indifferent, or even disagreeable to us; and so forth. It may be remarked that the general laws of association prevail among these more intricate states of mind, in the same manner as among the simpler ones. A desire, an emotion, an idea of the higher order of abstraction, even our judgments and volitions, when they have become habitual, are called up by association, according to precisely the same laws as our simple ideas....

§ 4. In the course of these inquiries, it will be natural and necessary to examine how far the production of one state of mind by another is influenced by any assignable state of body. The commonest observation shows that different minds are susceptible in very different degrees to the action of the same psychological causes. The idea, for example, of a given desirable object will excite in different minds very different degrees of intensity of desire. The same subject of meditation, presented to different minds, will excite in them very unequal degrees of intellectual action. These differences of mental susceptibility in different individuals may be, first, original and ultimate facts; or, secondly, they may be consequences of the previous mental history of those individuals; or, thirdly and lastly, they may depend on varieties of physical organization. That the previous mental history of the individuals must have some share in producing or in modifying the whole of their mental character, is an inevitable consequence of the laws of mind; but that differences of bodily structure also co-operate, is the opinion of all physiologists, confirmed by common experience. It is to be regretted that hitherto this

experience, being accepted in the gross, without due analysis, has been made the groundwork of empirical generalizations most detrimental to the progress of real knowledge.

It is certain that the natural differences which really exist in the mental predispositions or susceptibilities of different persons are often not unconnected with diversities in their organic constitution. But it does not therefore follow that these organic differences must in all cases influence the mental phenomena directly and immediately. They often affect them through the medium of their psychological causes. For example, the idea of some particular pleasure may excite in different persons, even independently of habit or education, very different strengths of desire, and this may be the effect of their different degrees or kinds of nervous susceptibility; but these organic differences, we must remember, will render the pleasurable sensation itself more intense in one of these persons than in the other; so that the idea of the pleasure will also be an intenser feeling, and will, by the operation of mere mental laws, excite an intenser desire, without its being necessary to suppose that the desire itself is directly influenced by the physical peculiarity. As in this, so in many cases, such differences in the kind or in the intensity of the physical sensations as must necessarily result from differences of bodily organization, will of themselves account for many differences not only in the degree, but even in the kind, of the other mental phenomena. So true is this, that even different qualities of mind, different types of mental character, will naturally be produced by mere differences of intensity in the sensations generally; as is well pointed out in the able essay on Dr. Priestley, by Mr. Martineau, mentioned in a former chapter:

“The sensations which form the elements of all knowledge are received either simultaneously or successively: when several are received simultaneously, as the smell, the taste, the color, the form, etc., of a fruit, their association together constitutes our idea of an object; when received successively, their association makes up the idea of an event. Any thing, then, which favors the associations of synchronous ideas will tend to produce a knowledge of objects, a perception of qualities; while any thing which favors association in the successive order, will tend to produce a knowledge of events, of the order of occurrences, and of the connection of cause and effect: in other words, in the one case a perceptive mind, with a discriminate feeling of the pleasurable and painful properties of things, a sense of the grand and the beautiful will be the result: in the other, a mind attentive to the movements and phenomena, a ratiocinative and philosophic intellect. Now it is an acknowledged principle, that all sensations experienced during the presence of any vivid impression become strongly associated with it, and with each other; and does it not follow that the synchronous feelings of a sensitive constitution (i.e., the one which has vivid impressions) will be more intimately blended than in a differently formed mind? If this suggestion has any foundation in truth, it leads to an inference not unimportant; that where nature has endowed an individual with great original susceptibility, he will probably be distinguished by fondness for natural history, a relish for the beautiful and great, and moral enthusiasm; where there is but a mediocrity of sensibility, a love of science, of abstract truth, with a deficiency of taste and of fervor, is likely to be the result.”

We see from this example, that when the general laws of mind are more accurately known, and, above all, more skillfully applied to the detailed explanation of mental peculiarities, they will account for many more of those peculiarities than is ordinarily supposed. Unfortunately the reaction of the last and present generation against the philosophy of the eighteenth century has produced a very general neglect of this great department of analytical inquiry; of which, consequently, the recent progress has been by no means proportional to its early promise. The majority of those who speculate on human nature prefer dogmatically to assume that the mental differences which they perceive, or think they perceive, among human beings, are ultimate facts, incapable of being either explained or altered, rather than take the trouble of fitting themselves, by the requisite processes of thought, for referring those mental differences to the outward causes by which they are for the most part produced, and on the removal of which [pg 596] they would cease to exist. The German school of metaphysical speculation, which has not yet lost its temporary predominance in European thought, has had this among many other injurious influences; and at the opposite extreme of the psychological scale, no writer, either

of early or of recent date, is chargeable in a higher degree with this aberration from the true scientific spirit, than M. Comte.

It is certain that, in human beings at least, differences in education and in outward circumstances are capable of affording an adequate explanation of by far the greatest portion of character; and that the remainder may be in great part accounted for by physical differences in the sensations produced in different individuals by the same external or internal cause. There are, however, some mental facts which do not seem to admit of these modes of explanation. Such, to take the strongest case, are the various instincts of animals, and the portion of human nature which corresponds to those instincts. No mode has been suggested, even by way of hypothesis, in which these can receive any satisfactory, or even plausible, explanation from psychological causes alone; and there is great reason to think that they have as positive, and even as direct and immediate, a connection with physical conditions of the brain and nerves as any of our mere sensations have. A supposition which (it is perhaps not superfluous to add) in no way conflicts with the indisputable fact that these instincts may be modified to any extent, or entirely conquered, in human beings, and to no inconsiderable extent even in some of the domesticated animals, by other mental influences, and by education.

Whether organic causes exercise a direct influence over any other classes of mental phenomena, is hitherto as far from being ascertained as is the precise nature of the organic conditions even in the case of instincts. The physiology, however, of the brain and nervous system is in a state of such rapid advance, and is continually bringing forth such new and interesting results, that if there be really a connection between mental peculiarities and any varieties cognizable by our senses in the structure of the cerebral and nervous apparatus, the nature of that connection is now in a fair way of being found out. The latest discoveries in cerebral physiology appear to have proved that any such connection which may exist is of a radically different character from that contended for by Gall and his followers, and that, whatever may hereafter be found to be the true theory of the subject, phrenology at least is untenable.

John Stuart Mill. *A System of Logic*. New York: Harper and Brothers, 1882.

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