English Philosophy in Our Time.

By

Dr. **H. Høffding.**

Copenhagen.

P. G. *Philipsen's Publishing House.*

Printed by J. H. *Schultz.*

1874.

English translation of *Den engelske Philosophi i vor Tid* (1874).

Contents.

Page.

Chapter One: **General Characterization** . . . . . 1.

The Conditions of Philosophical Knowledge. — The Earlier English Philosophy. — The English Philosophy of Our Time and its Relation to Other Schools.

Chapter Two: **Pure Empiricism** . . . . . 18.

I. *John Stuart Mill* . . . . . 18.

Historical Presuppositions (Hartley and James Mill). — Logic and Psychology. — The Idea of the Absolute. — Ethics and Sociology.

II. *Alexander Bain* . . . . . 66.

Sense-perception and Thought. — The Classification of the Feelings. — Ethics. — Will and Belief.

Chapter Three: **The Critical School in England** . . . . . 88.

I. *William Whewell* . . . . . 90.

The Philosophy of the Inductive Sciences. — Relation to Kant and to Theology.

II. *William Hamilton* . . . . . 99.

Polemic against the Philosophy of the Unconditioned. — Hamilton's Disciple *Mansel* and his Critique of Theology. — Hamilton's Logic and Psychology. — The Doctrine of Causality.

Chapter Four: **The Philosophy of Evolution** . . . . . 116.

Herbert Spencer. — General Characterization. — The Idea of the Absolute (the Relation between Religion and Science). — The First Principles. — Biology. — Psychology and Theory of Knowledge. — Ethics and Sociology.

Conclusion . . . . . 184.

Chapter One.

General Characterization.

Human development does not proceed in a straight line. In every domain we find *[1]* that times full of fortunate and magnificent progress alternate with apparent stagnation or retrogression, in which the forces stir in concealment or work in other domains. And this holds to a higher degree, the more composite an endeavor is, the more conditions it presupposes in order to succeed. Of none, therefore, does it hold more than of the philosophical striving. To philosophize is not the same as to give oneself up to immediate intuitions and brilliant attempts to grasp and present the Ideal. If philosophizing is really to have scientific significance, a clear and certain consciousness of the nature of truth and of reality must be laid at the foundation of the whole endeavor. The True and the Real must be powers before which thought bows, because in them it recognizes its own law and in submission to them its true freedom. The striving of thought must aim at letting itself be bound step by step; only by being bound throughout does thought have validity. All philosophizing therefore presupposes a double system of conditions. Thought must be awake, the drive toward a coherent and all-embracing view of the world must be alive; but on the other hand the factual foundation, the mass of particulars, must also lie so prepared that it becomes really possible for thought to get beyond its subjective and accidental ideas and to assume the forms of truth and of reality. Ac- *[2]* cording as these conditions alternate, the epochs of philosophical inquiry alternate also. This lies in the matter itself and is confirmed by history. Recent German philosophy, which was introduced in so energetic and brilliant a manner by Kant, and which in him, its greatest representative, still stood in close and fruitful interaction with experience, exhausted all its possibilities in systems in which the given fund of determinations of reality was so far absorbed that the law of existence was finally made one with the dialectical movement of thought itself. Then came a time in which men were inclined to throw all philosophy overboard; interest turned toward reality; it was a brilliant period for exact, experimental natural science; material was gathered in all domains. But the old problems could not be kept out; they press forward again with irresistible force, and we find, in part even precisely on the side of such men as took part in experimental research, a series of new attempts to treat the philosophical tasks. A similar course of development we find in England. After a magnificent philosophical activity in the 17th and the first part of the 18th century, England was poor in philosophical attempts, until

interest was awakened again toward the middle of our century. "There was a time," says Herbert Spencer (Essays. 1868.1. p. 300), "when our countrymen speculated — and certainly to as great an extent as any other people — on all the high questions that present themselves to the human mind; and a glance at the philosophical systems that are or have been dominant on the Continent suffices to show how much other nations owe to the discoveries of our forefathers. But for a generation or two these more abstract subjects have been neglected, indeed even (by those who boast of being 'practical') despised. Partly perhaps a consequence of our rapid material growth, this intellectual phase is due in great part to the exhaustion of material and the necessity of better data.
[3] Not so much with conscious recognition of the end to be served, as with unconscious subordination to the rhythm that can be traced in social changes as well as in other things, a period of theorizing without observing has been followed by a period of observing without theorizing. During the long-continued devotion to concrete science an immense quantity of raw material has been accumulated for abstract science, and now a period is evidently about to begin in which this accumulated raw material will be organized into a coherent theory. At all points, in the inorganic sciences, in the science of life and in the science of society, we may observe a tendency to pass from the superficial and empirical to the deeper and rational." When we speak of the English philosophy of our time, it is thus more than an accidental series of phenomena that we bring forward; it is a series of endeavors that arise in consequence of a natural law of development and therefore with a peculiar character conditioned by their place in the development.

The double presupposition of philosophical inquiry, which has the effect that its course of development becomes rhythmical or almost leaping, also contains the possibility of a decisive opposition within philosophy. Two different points of departure become possible. The general task is that thought shall appropriate the True and the Real. But, it may then be said, only by and for thought is anything real and true; the essence of thought is therefore an essential and self-valid element in reality; what actually exists is only a means for the development of thought, the knowledge of it only the way by which thought becomes conscious of itself, and in this consciousness the highest truth is contained. Here, then, the emphasis is laid on the ideal element, on the original activity of thought as the last presupposition for all knowledge. But, it is said from the other side, a knowledge without real, objectively valid content is merely subjective and illusory. When thought wishes to be self-active, it keeps within its own
[4] self-created ideas, in so far as it does not follow traditional prejudices. If reality is to be known, thought must therefore behave altogether passively and receptively. All knowl-

edge must come about by the gathering of impressions and experiences, and only that can lay claim to truth which can be traced directly or indirectly back to this source. — The opposition between the two main tendencies within philosophy rests, then, on the different answer to the question: Wherein does the criterion of truth and of reality ultimately consist? The one answer refers us to the necessity of thought, the other to the reality of experience. This is the fundamental opposition; but on the basis of it there unfolds a multitude of derivative oppositions, of extraordinary importance for the whole view of the world. The question must then present itself whether it is possible to reconcile the two principles and with them the two views of the world.

However, this question can come forward only when an interaction, a real debate, between the two philosophical schools has been initiated. But this may in part be prevented by their belonging to different nations. An opposition as decisive as the one that has here developed with regard to the whole direction of philosophical inquiry points back to more comprehensive psychological and national differences. Mode of thought and view of the world are not anything isolated; they are factors that stand in living connection with the whole character of the individual and of the people. The idealistic school has in modern times had its home chiefly in Germany, the realistic in England. Germans and Englishmen are the real philosophizing nations of modern times, they stand in the history of philosophy beside the Greeks. National limitation has here acted as a hindrance, but not merely as a hindrance. For in philosophical inquiry what matters essentially is clarity and consistent carrying through of the line of thought, and to this is required an exact and thorough working out of the fundamental ideas, which is possible only on the condition of a certain one-sidedness. On this rests the significance of the different philosophical schools, and on this rests also the significance of the influence of the individual and the national character upon philosophical thought. Important and *[5]* decisive fundamental concepts would never have been thought through without such limitations and one-sidednesses. Thus German and English philosophy in particular, by their consistent development proceeding step by step, have cast a clear light on great circles of thought that would otherwise not have been measurable. And only thereby can that fundamental opposition between the main philosophical tendencies present itself in so clear and precise a form that work toward overcoming it becomes possible. —

From what has been set forth so far it follows that there are three essential conditions for progress in philosophical knowledge. Philosophy presupposes the reality given in experience as its material. It aims at a consistent carrying through of the principle. But

since this principle, according to the nature of the case, is developed one-sidedly in the different schools, it strives to correct this one-sidedness by a union of the apparently opposed standpoints. — It shall now be shown that the English philosophy of our time is of great significance in all three respects.

English philosophy has at all times had an empirical and realistic character. In the Middle Ages we find Englishmen as the most prominent representatives of Nominalism, the tendency within Scholasticism that corresponds to modern Realism. Duns Scotus († 1308) polemizes against Thomas Aquinas, the representative of ecclesiastical speculation, and asserts in particular the significance of individuality. According to Thomas the universal idea was true reality, and the individual came about only through a limitation that was due to matter. But, says Duns Scotus, that which makes a thing this determinate thing must be something positive; the individual is the perfect, the highest reality. Roger Bacon († 1292) scoffed at Albertus Magnus and Thomas Aquinas because they wanted to philosophize without having learned languages, mathematics and physics,
[6] and he had to languish in his prison because his zealous occupation with, and praise of, scientia experimentalis made him suspected of magical arts. William Occam († 1347) carried Nominalism further. Only the particular is real; it cannot be explained and dissolved by universal determinations of concepts; the universal concepts have no reality outside the understanding; they are signs and symbols that express the sum of the individual phenomena. All knowledge therefore rests on intuition, which in turn points back to inner or outer experience. Since we cannot experience or intuit the essence of God, we cannot therefore attain any knowledge of God; theology is no science, but rests solely and alone on supernatural authority. Occam repeats what Duns Scotus had already expressed, that something may be true in theology that is not so in philosophy. — The nominalistic or empirical tendency in this way bursts Scholasticism asunder. The opposition that appears in more recent times between English philosophy and that of the Continent we can thus trace back to the Middle Ages.

Bacon of Verulam († 1626) is the founder of modern English philosophy. From speculative and theological studies he calls the human mind back to nature and its knowledge. Only there is a secure foundation to be found for science. Left to itself, thought strays into illusory and arbitrary presuppositions (idola mentis), which arise partly from human nature, partly from social conditions. From these unreliable presuppositions one frees oneself by submitting to the law of experience, by examining the particular by way of induction, in order thereby to arrive at the true fundamental concepts (notiones rerum primæ). Inductive natural science is for Bacon the mother of all sciences, to which

logic and moral philosophy too shall be traced back. Its aim is not merely knowledge, but progress in civilization, in that human life by its inventions shall be more richly furnished with goods of every kind, and man's power over nature extended. — When Bacon thus demands that man shall strip off all self-activity in knowledge and behave *[7]* as passively as possible, he thereby paves the way for sensualism, which derives all knowledge from sense-perception and regards all ideas and thoughts as transformed sensations of sense. This doctrine was developed by Thomas Hobbes († 1679) and John Locke († 1704). The laws according to which sensations are combined and compounded and thereby transformed into thoughts could be none other than the laws of the association of ideas; when mental activity is rejected, there remain only the passive phenomena of the mind. David Hartley († 1757) was the first who sought to explain all phenomena of consciousness as results of the association of ideas. Finally David Hume († 1776) drew the last consequences of empiricism and sensualism. Both the inner and the outer world, both the self and the world, we know only through our sensations of sense and ideas; and the inner sense, the circle of ideas, is only a faded image of the outer sense; in the last instance we know then only the series of sensations of sense. But then it is founded only on an illusion when we assume a self, an inner mental substance as the bearer of the circle of ideas, or an outer material substance as the cause of sensation of sense. It is altogether an illusion when we think we know a causal connection, a relation between cause and effect; we know only the succession of phenomena in time, no inner and necessary connection between them. It is only habit, which in turn is a product of the association of ideas, that leads us to such assumptions; but habit cannot ground any knowledge.

By sharp and consistent carrying through, empiricism had thus passed over into skepticism and had thereby dissolved itself. Nevertheless it was the principles of Hume and Hartley on which English philosophy leaned when, toward the middle of the 19th century, a period of flowering began again for it. We must therefore now state more precisely the relation between the English philosophy of our time and the earlier. The fundamental thought is the same: the nominalistic adherence to the particular and in- *[8]* dividual as the only real, the empiricist assumption of sense-perception and induction as the only sources of knowledge. But this fundamental thought receives a peculiar carrying through through the weight that is laid on the laws of the association of ideas as decisive for the growth and development of the life of consciousness and in particular of knowledge. Hume had said that we cannot attain any true knowledge, because we have only sensations of sense and their connections to build on. But, the English philoso-

phers of our time say to this, knowledge itself is nothing but a firm and indissoluble association of ideas. Thought is not a mystical force that in turn discovers a mystical bond as necessary connection between things. When certain ideas, in accordance with experience and the whole course of development, have entered into a firm connection, then we must regard them as belonging together. What are we ourselves, our self, but a firm and intimate composition, a chain of associated ideas? What we call necessary is only an expression of firmness in the association. But we can not only show psychologically how consciousness actually develops according to the laws of the association of ideas; we can also by logical analysis distinguish between justified and unjustified associations. Bacon had in general terms praised induction and combated the authority of the syllogism as the highest form of knowledge. But only now is inductive logic carried through, in that it is shown how the experimental method leads to the elimination of the accidental connections of thought and to the establishment and maintenance of those that are universal and therefore justified. Only on the basis of such a preceding, experimentally established linking together of ideas do universal laws become possible, and only thereby are starting points won for deduction, syllogism and mathematical analysis. Hume polemicized against natural science, but the English philosophy of our time places itself precisely by virtue of Hume's principles on the ground of natural science. Experimental natural science is in its essence skeptical. It will find only the laws of
[9] the mutual connections of phenomena, their succession and their coherence. Only because Hume did not know the experimental method could he turn his skepticism against natural science itself.[*)]

English philosophy in our time here recalls French positivism. One finds even very often positivism used as a common name, so that it also comprises the English school. And yet the first representatives of this school have with justice disclaimed the name of positivists, when this word is to designate them as disciples of Auguste Comte. We have already seen that the English philosophy of our time is a further development of the standpoint and results of the earlier English thinking, but in such a way that, in accordance with its logical and psychological principles, it came to enter into a close connection with experimental research. This research and its results are the common ground where it meets French positivism; what is common to both tendencies thus derives from the source from which they both draw. One must distinguish between positivism as a particular school, and what the French call l'esprit positif, a tendency

[*)] Stuart Mill (Examination of Sir William Hamiltons philosophy p. 555) even holds that Hume's skepticism was only a disguise: "he would rather be called a skeptic than be designated by a more odious name."

of mind that has sprung from the whole of modern culture and science, and of which positivism itself is only a particular form. The opposition between the French positivism and the English school may in its generality be stated thus: positivism goes from the special sciences to philosophy, the English school from philosophy to the special sciences. French positivism properly will not recognize any other problems than the special-scientific. It collects in a classificatory encyclopedia the principles and results of the individual sciences and is content with that. Only one decisive problem does it bring forward at last, and thereby involuntarily betrays its own innermost motive: the *[10]* problem of the development of humanity and in particular of the human life of society (the sociological problem). But it neglects the logical and psychological investigations which alone can form a basis for a philosophy, and which are also a necessary presupposition for the treatment of that great problem. In any case it does not recognize the independence of psychology but lets it go wholly under physiology (so Littré). English philosophy, on the contrary, takes its point of departure in logic and psychology and finds from there the way to the more special problems. —

The consideration of the English philosophy of our time in its relation to the earlier English thinking led us also to touch on its relation to the special sciences. But the most important contribution to the characterization of this philosophy remains still to come. It consists in a statement of its relation to the main philosophical tendency to which the earlier English school had formed a decisive opposition, the idealistic or speculative.

What we have for brevity's sake designated as the English school has no exclusive right to this name, in so far as, both earlier and in our days, philosophical tendencies have asserted themselves in England that stand in opposition to the empirical-realistic philosophy. In the 17th century we find such a tendency in the mystical Platonism that prevailed at the University of Cambridge, and whose most notable representatives were Henry More and Ralph Cudworth; Locke's polemic against the "innate ideas" is perhaps directed rather against them than against the Cartesians. In the 18th century there developed at the Scottish universities, as a reaction against English empiricism and its results, a particular Scottish school, whose real founder was Thomas Reid († 1796). This school had in part practical motives; it wished to ward off the allegedly dangerous consequences of the doctrine of Locke and Hume and was, as Cousin expresses himself, "a protest of sound human understanding and of conscience against Locke's *[11]* philosophy." Reid contests the empirical school's doctrine of the sensations of sense as the original elements, by whose association and combination the whole mental life develops. He teaches that our consciousness immediately apprehends external objects.

We pass judgments instinctively about things; and these involuntary assumptions contain the first and natural principles of all our knowledge. They are the original facts of consciousness, whose sum makes up the so-called "common human understanding" (common sense). Of such "natural principles" Reid enumerates a great many, among others: the proposition that every sensation points to an external object; belief in our personal identity; further, mathematical and metaphysical principles (e.g.: Everything has its cause), and moral commands (e.g.: One shall set duty above utility). All these principles are supposed to lie immediately in consciousness. — It is not by setting up "the principles of sound human understanding" but by the investigation of empiricism that they set in motion, and by the sense for psychological investigations that they awakened, that Reid and his school have exerted no small influence. In France Royer Collard and Victor Cousin took the field against Condillac with Reid's weapons. But in England too Scottish philosophy has been of great significance, in particular since, in its greatest representative in our time, William Hamilton, it entered into a peculiar combination with Kantian philosophy. This leads us to inquire how German philosophy intervenes in the course of development of English thought in our time. Kant, who by his own declaration received the impulse to his epoch-making inquiry from David Hume, has since himself reacted significantly upon Hume's fatherland.

Kant, like Reid, steps forth against Hume's skepticism. But whereas for the anxious Reid it was above all a matter of securing the reality of the self and of the external world, on which account his attempt also took on a more superficial character, Kant
[12] went deeper and found in the problem of causality the real point at issue between the two tendencies. He could not content himself with the Scottish school's appeal to sound human understanding. That the common human understanding knew and applied the concept of cause, Hume did not deny; but the dispute turns precisely on the significance and validity of this concept. In any case one ought, thought Kant, rather to use one's sound human understanding to give proof of what one assumes than to invoke it as an oracle. In thinking the matter through Kant became aware that there is a whole circle of forms of intuition and concepts which lie at the foundation of all experience, because they are the different forms and ways in which the material given in sensation is gathered into unity for intuition and thought. These forms must therefore, he concluded, be a priori, originally given in our nature. They cannot derive from experience, since all experience precisely presupposes them, and since they have universal and necessary validity, which mere abstractions from experience cannot have, since experience never shows us the Unconditioned. Precisely by virtue of the validity of experience Kant thus

asserts the originality of thought. He has hereby paved the way for an entirely new conception of a priori or speculative knowledge. This can no longer, as in dogmatism, be a finished and closed system, which was supposed to be developable without regard to experience; but it always presupposes experience, and takes it up into itself by virtue of its own principle: "That all our knowledge begins with experience," says Kant, "of that there is no doubt; but it does not therefore follow that all our knowledge springs from experience." Kant himself distinguished so sharply between the subjective and the objective that it looks as if the forms of thought and intuition stand ready-made on the one side, and the content only comes in from the other side; but the true consequence of the critical philosophy Schelling has expressed in the proposition that our knowledge is just as little a priori as a posteriori, since this opposition is due only to reflection. Schelling shows further that there are indeed a priori but not innate concepts. "Not *[13]* concepts, but our own nature and its whole mechanism is innate in us. This nature is of a determinate constitution and acts in a determinate way, but perfectly unconsciously, for it is itself nothing other than precisely this acting." The soul is neither a written nor an unwritten tablet.

It was Samuel Coleridge († 1834) who became above all the intermediary through which German philosophy made its influence felt in England. In his youth he had been an ardent admirer of Hartley and Hume, but was later repelled by these thinkers' denial of the activity of the mind. He saw rightly that when the doctrine of the association of ideas is made the main psychological doctrine, all phenomena of consciousness are conceived as completely passive. From this standpoint he has already (in his Biographia litteraria vol. I. pars II. p. 116 ff) given a striking critique of the so-called "Association psychology." The study of Kant and his successors led him quite beyond empiricism. He became so at home in the principles of the critical philosophy that on his own way he reached several of the ideas which Schelling expressed in his system of identity, so that this even brought upon him an accusation of plagiarism. As a poet Coleridge worked to introduce Romanticism into England; as a thinker and publicist he worked to spread knowledge of the fundamental thoughts of German philosophy. Even so decided an opponent of these as Stuart Mill places him beside Bentham and regards these two men as the two fertilizing minds of their time. Mill acknowledges that the attacks on Locke's philosophy from the German as well as from the Scottish school have essentially spurred on psychological inquiry and called attention to the difficulties that were still unovercome. (Dissertations and discussions I.). Buckle mentions in his history of civilization, besides the influence of the Scottish school, also "the sudden and well-deserved admi-

ration for German literature, to which Coleridge especially gave expression, and which
[14] instilled into the English mind a taste for higher and bolder views than it had hitherto known"; but he unfortunately did not live long enough to complete a description of this movement.

The influence which critical and speculative philosophy exerted on empiricism consisted, first, in leading it to a sharper consciousness of its own principle and a more consistent carrying through of it, whereby, on the other hand, the conviction was bound to develop that empiricism necessarily points beyond itself. Hume had rejected the concept of causality, but he acknowledged the propositions of mathematics as necessary, because they were grounded on the principle of contradiction and not on external experience. Kant remarked to this that Hume consistently must also have denied necessity in the mathematical domain. This Stuart Mill acknowledges and teaches that all mathematical axioms are grounded on experience, on firm and constant association of ideas, and that the principle of contradiction is merely the expression of the most abstract result of experience. Only thereby has empiricism reached its completion. But when all necessity is thus denied, the question must naturally be raised how empiricism is to be able to prove its own truth. Herbert Spencer maintains here against Stuart Mill that, if the whole of empirical knowledge is not to hang in the air, there must be a criterion which from the first and throughout lies at the foundation of it, and by virtue of which every advance in knowledge is made. "To say that there are no necessary truths is the same as to say that the conclusion is not necessarily contained in its premises but is an empirical judgment, which is not certainly true. Pure empiricism starts from an uncertainty and moves through a series of uncertainties. One can stop it at every step, as long as it has not accounted for its original presupposition." Before one assumes anything to be true, one must make clear to oneself what the condition is, in general, for something
[15] to be true. Consciousness must, by examination of its own states, come to a decision as to which property it really is that is meant when anything is posited as true.

One of the difficulties in the psychology of the earlier empirical school was the one emphasized by Coleridge, that the activity of the mind remained unexplained. Here English psychology has taken a step which Stuart Mill aptly compares with the step by which Laromiguiére went beyond Condillac, in that he emphasized the activity of the mind in attention. Supported by physiological facts, Alexander Bain, an English psychologist who stands close to Mill, has indeed demonstrated an original active element as the point of departure for mental life, namely the primitive, automatic movement, which precedes all sense-perception, which in the individual sense-perceptions

is guided in determinate directions, but without which these sense-perceptions cannot take place, — the first germ of the activity of thought and of will.

The eye having thus been opened to sides of reality to which men had formerly been blind, it was at the same time led to bolder and more comprehensive points of view. Beside the philosophers there appear here the historians and the natural scientists. The idea of the development of the human race and of the human mind in the different domains makes its way through the philosophy of history founded by Kant and Herder; the speculative philosophy of nature and comparative natural science show that the idea of evolution is not limited in its validity to the world of mind, but that it embraces nature and mind as links of the same chain. The older school's anxious and narrow psychological empiricism vanished before these magnificent views. The task then necessarily had to present itself of gathering all individual investigations into a comprehensive view of the world, governed by one guiding principle. It is a task for which there are only scattered contributions in the earlier English thinkers, but which the great philosophical systems on the Continent were attempts to solve. The English philosophers of our time *[16]* too maintain that our knowledge is only relative and phenomenal and cannot grasp the Absolute; but relative knowledge itself can nevertheless be organized into a coherent whole, and since it is impossible for thought to hold the Relative dualistically separated from the Absolute, which it must posit in one form or another, we see also the most profound of these philosophers, Herbert Spencer, acknowledge that in the measuring out and articulation of the domain of relative knowledge indirect determinations are won of the absolute force, to which the idea of evolution, the ruling idea in the realm of phenomena, points back.

In this way empirical philosophy approaches speculation, partly by acknowledging the original presuppositions on which speculation too builds (the a priori criterion of truth; the original activity of the self), partly by the endeavor after an all-embracing view of the world, which in the conditioned finds determinations for the Unconditioned, in the Relative indirect forms of the Absolute, — it approaches in particular that tendency in the German philosophy of our time which may be called the idealism of reality, because it proceeds from the consideration of reality and arrives at the result that this is in the last instance of an ideal nature.[*)] A similar course we find in the English philosophy of the present day. Here among the English there is a stronger empirical and skeptical tendency, but the practical idealism that is so characteristic of these apparently so prosaic inquirers must in the end also bring speculative consequences with

[*)] See my book "Philosophien i Tydskland efter Hegel" pag. 220—319.

it, in so far as the theoretical interest does not already lead in this direction. Also as regards the German "idealism of reality" it holds that the Absolute is essentially conceived as a scientific and practical ideal. The time seems on the whole to be past when
[17] men believed that by the way of dialectical development of concepts they could grasp the Absolute. Even the highest and most clearly drawn concept of God is yet only a symbol, a limiting concept, which we arrive at, but which we cannot carry through. Yet it must be maintained that we arrive at this concept of necessity. That it must be a hypothesis is true; but it is a hypothesis we are compelled in one form or another to set up, and the question therefore cannot be put aside in philosophy which hypothesis comes nearest to the truth. Speculative criticism has work enough here, a work that will never end, as long as the human mind does not grow tired of occupying itself with its highest ideas. This too is one of the points in which English philosophy differs from French positivism. August Comte wished indeed to abolish all theology and metaphysics, but nevertheless posited an Absolute, a "highest being," which coincided with humanity itself, regarded as a whole in past, present and future, in whose service and for whose development all individuals are to work and wholly sacrifice themselves. Against this holds the objection that Spencer advances, that the Unconditioned cannot be sought in any single domain, but must be the universal force that stirs in everything and lies at the foundation of all existence. —

From this general characterization we can draw the result, which in the following exposition will find its closer justification, that English philosophy in our time shows us how empiricism, precisely when it is carried through, leads beyond itself. As we have seen, the English philosophy of our time takes its point of departure in the principles of the earlier English school, but by the development it gives these principles it leads them beyond the limitation of the school. We must therefore ascribe to it no small significance for the further development of philosophy and the working out of its universal problems. —

As already remarked, by English philosophy we understand in particular the empirical and realistic tendency. But in order to give a clear picture of the philosophical
[18] movement in England we must nevertheless also bring forward the representatives of the opposition to this tendency. Having therefore first occupied ourselves with Stuart Mill, the consummator of empiricism, and with the psychologist Bain, who in essentials adheres to him, we shall characterize in brief Mill's opponents Whewell and Hamilton, who have been influenced above all by the critical philosophy. The third section of our exposition will give a survey of the doctrine of Herbert Spencer, which at once

has its presuppositions in the empirical and the critical school, which most clearly and definitely leads beyond the boundaries of empiricism, and which marks the grand conclusion of the philosophical endeavors in England in our time.

Chapter Two.

Pure Empiricism.

I. *John Stuart Mill* (b. 1806, d. 1873) received, as one sees from his Autobiography, impressions already early that became decisive for his whole theoretical and practical direction. His father, James Mill, led him early into the philosophy of the 18th century and taught him to regard its doctrines not merely as theories, but almost as expressions of his religion, because they alone were able to combat the prevailing prejudices which hinder the progress of humanity toward freedom and felicity. It is through James Mill that the English philosophy of our time stands in connection with that of the 18th century. He was essentially formed by the study of Hartley and Hume and, like these two thinkers, regarded the association of ideas as the fundamental psychological law, a conception which has already been prepared by Thomas Hobbes. Although Stuart Mill has not dealt especially with psychology, this psychological theory nevertheless underlies his whole system; to it, as he himself constantly emphasizes, all his logical, metaphysical *[19]* and ethical investigations go back. We must therefore, both in order to show the historical connection between the English philosophy of the 19th and that of the 18th century and in order to understand Stuart Mill's standpoint in particular, briefly mention the earlier forms of the said psychological theory.

In its development from Locke to Hume the philosophy of the 18th century was led to eliminate the concept of the self and to conceive mental life merely as a train of ideas and sensations, a train which was then in turn sought to be simplified by tracing all ideas back to sensations of sense. The laws of mental life were then conceived not as expressions and forms of the energy of the self, but as formulas for the mechanical interaction between the individual members of the train of mental phenomena, in the last instance of sensations of sense. A complete doctrine of these laws, the laws of the association of ideas, was first sought by David Hartley (b. 1705, d. 1757) to give in his work "Observations on man." Hartley gives the theory of association a physiological foundation, in that, adhering to Newton's emission theory, which the great investigator of nature employed not merely to explain the effects of light, but also to explain the effects of

the nerves, he traces all sense-perceptions and ideas back to vibrations in the substance of the brain, evoked by impressions from without. When now certain determinate vibrations frequently return, there must arise in the substance of the brain a disposition to repeat them under certain conditions. What these conditions are, we learn from the laws of the association of ideas, which we find by psychological analysis. Whereas Hume still distinguishes between three different laws of association: association by resemblance, coincidence (contiguity) and relation of causality between the ideas, Hartley traces these laws back to a single one, the law of coincidence, of contact (contiguity): two sensations of sense are connected or associated when the impressions that evoke them occur simultaneously or immediately after one another. When afterwards the one
[20] impression recurs, there will be a disposition to evoke also the idea corresponding to the other impression, in so far as in the brain there will be a disposition to repeat the vibration corresponding to this other impression. An idea is only the remainder of an earlier impression, resting on a weaker vibration, which is as it were the after-sound of the strong vibration evoked by the impression itself. Through the fusion of individual ideas by means of their frequent repetition in union with one another there arises a compound idea, which in the end seems to form an indissoluble unity, because the individual elements of ideas of which it is composed disappear from consciousness, in that each single one of them is overcome by the sum of all the others. The compound idea seems in the end to have no kinship at all with the ideas and sense-perceptions from which it has come to be, just as a medicine may in its taste be wholly different from each single one of the substances of which it is prepared. The compound ideas can now in turn be compounded with one another, and so on to infinity. Hence it comes that many ideas seem to arise as it were of themselves, from within, which one has then, like Locke, derived from a special mental faculty, reflection; but a continued analysis will be able to trace all, even the highest and most compound ideas, back to single ideas, and these in turn to impressions of sense. On the feeling of pleasure and displeasure the associations of ideas exert an educative power: the sensuous sensations gradually give way to the ideal feelings, in that the immediate objects of pleasure and pain recede before ideas that do not in themselves bring with them sensuous enjoyment or suffering. On this rests the ability to cultivate one's will and to raise oneself above the sensuous. And in this way the moral sense and the moral ideas are formed. But on the other hand all prejudice and all influence of authority also rests on the power of the association of ideas.

Coleridge has rightly emphasized the strict consistency with which Hartley carries

through his theory. When mental life is conceived as resting on mechanical connections *[21]*
between individual elements, then, as in the connection between material atoms, it can only be immediate contact that brings about the connection. Therefore in Hartley the psychological hypothesis also stands in close connection with the physiological theory. For though there is not, as Lewes emphasizes in his criticism of Hartley, any such likeness between physiological and psychological phenomena that we could learn anything about the latter from the former, and our acquaintance with the sensations is greater than our acquaintance with their physiological foundation; yet association psychology rests precisely on this, that the mental phenomena are conceived in analogy with the bodily ones. When therefore the physiological hypothesis is given up, association psychology has already lost its absolute character.

James Mill's (b. 1773, d. 1836) psychological doctrine differs from Hartley's by the abandonment of the physiological hypothesis and by a more determinate and careful carrying through of the psychological analysis. His "Analysis of the phenomena of the human mind" appeared in 1829 and was in 1869 published anew by his son, furnished with exceedingly interesting notes by the latter, by the psychologist Bain, by the philologist Findlater and by the historian Grote. In these notes corrections and explanations are given and the investigation is carried further, so that one has here as it were a repertory of empirical psychology in England. — In James Mill, as in Hartley, it is the law of contiguity (of contact) that is laid down as the foundation. Sensations that are wont to occur simultaneously or immediately after one another associate with one another, and the ideas follow after or with one another like the sensations of sense whose images they are. Besides the frequency of the coincidence of certain sensations, it is also the interest that this coincidence has for the individual that strengthens the association; interest leads us to take note of the frequent and constant connections, for it is on them that we base the plans for our action. Soon there forms itself in consciousness an opposition between constant and variable relations. I have seen the bird fly from west to *[22]*
east as often as from east to west, but I have always seen the stone in the end fall to the earth when it was thrown, never continue to fly in the opposite direction. Two ideas that in this way always show themselves to belong together enter into an indissoluble union, a fixed association, and in this consists what we call belief or assumption. When we see the one phenomenon occur (e.g. the throw of the stone), we also expect that the other (the fall of the stone) will follow. —

The psychological mechanism that Hartley and James Mill taught lies now, as already remarked, at the foundation of Stuart Mill's whole doctrine. It forms the pre-

supposition to which he returns at every point. But he does not accept the doctrine of association wholly in the form in which those older investigators presented it; his own investigations led him at several decisive points beyond it, as one sees in particular from his notes to his father's work. This brings then not a few inconsistencies into his doctrine, in that he has not become aware that the corrections he makes in the older theory often directly lead to the complete abolition of its presuppositions, which he nevertheless believes he can retain. As clear and open a mind as this thinker is, as great a pleasure and joy as he finds in debate with other standpoints, and as unreservedly as he acknowledges, when he has become aware of difficulties that his theory cannot solve, still he does not notice that he has here abandoned his original presuppositions. He mentions in his Autobiography the struggle he had to go through in order to free himself from the one-sided points of view that his father's strong influence had early instilled in him; and we shall find the traces of this struggle in the indicated inner contradictions in his doctrine. Association psychology is the mighty weapon he turns against his opponents, but it is at the same time a weight that burdens him himself and makes him unable
[23] to complete what he strives to attain. Quite in general that contradiction may be said to arise from the fact that the theory of association rests on an external and mechanical conception of mental life, which is indeed justified as an empirical foundation, but which overlooks a remainder that here is the real kernel of the matter, namely the real self, the subjective energy, which must be present, if only in rudimentary form, in the obscurest sensation, and which is the power that alone can bring unity and coherence into the circle of ideas. The association of ideas is one of the most important real factors in mental life, but can itself be rightly conceived only by being seen as an elementary form of the energy of the self. When one, as we shall see Stuart Mill do, concedes that this energy constitutes the real essence of the mind, and that it cannot be explained by the doctrine of association, then it is inconsistent to continue to regard the principles of the latter as the sole foundation of psychology.

Had Stuart Mill's relation to the earlier English philosophy been better known, one would not so often have seen him designated as a positivist and as a disciple of Auguste Comte. He has himself expressly rejected this designation in his work: "Auguste Comte and Positivism." Not only was his whole view established before Comte's writings appeared, but he also departs in very essential points from the great French philosopher. As the latter's chief merit Mill emphasizes his conception of the development of the human mind through three stages, the theological, the metaphysical and the positive, and the manner in which he thereby grounds the classification of the sciences. But to this

acknowledgment Mill adds some peculiar limitations. Because it is admitted that we know only phenomena and their laws, while the Absolute lies beyond our reach, it does not follow that the theological stage should be wholly overcome in the sense that there should come a time when the human race wholly ceased to ask after the original cause, the absolute principle of all. The "positive" philosopher may form on this the opinion that he considers the right one; it will then become the object of positive criticism; but *[24]* it is not necessary that all thinkers agree in these matters. "He who regards all events as links in a fixed order, each of them being the unchangeable consequence of a preceding condition or of a combination of preceding conditions, adopts completely the positive way of thinking, whether he acknowledges or does not acknowledge a universal ground whose original consequence the whole system of nature is, and whether this universal ground is conceived as mind or not." Because further the positive stage is to replace the metaphysical, it does not follow that it would no longer be necessary to make investigations and analyses of the presuppositions and principles on which our knowledge rests. But the significance of such investigations Comte is inclined to overlook, just as he has given logic and psychology no place at all in his system (cf. above pp. 9-10). The general theory of science has two tasks to solve: it is to show us the ways by which human thought attains knowledge, and the means by which the truth of knowledge can be established. But Comte has treated only the first task, not the second; he has not seen the significance of verification, which inductive logic shows. With this it is connected that Comte regarded hypotheses as means to satisfy our intellectual need of clarity and coherence among the phenomena, instead of as ways to find the real causes of the phenomena. He even declares that "the most philosophical point of view in the end leads to conceiving the study of the laws of nature as destined to represent the external world to us, with the satisfaction of the essential inclinations of our understanding", among which he counts the need of order and harmony, of beauty and ideality. The center of gravity thus threatens here to shift from the objective to the subjective, although positivism, according to Comte's doctrine, was precisely to exclude everything subjective. Rightly Mill finds in this the germ of Comte's later mystical speculations, where the "subjective synthesis" was to take the place of the objective. Mill is here more positivist *[25]* than Comte, but he leaves positivism by maintaining logic as a distinct science. — Just as Comte overlooked the significance of logical analysis, so he also denied the reality of psychology as an independent science, because it rests on self-observation, which according to his view leads only to subjective illusions. In place of psychology he would put phrenology. Mill maintains the independence of psychology as a science that has its

own peculiar principles and laws, namely the laws of the association of ideas, which are for psychology what the law of gravitation is for astronomy, and what the elementary properties of the tissues are for physiology. — Philosophy has thus for Mill a deeper ground and a wider scope than for Comte. Mill himself has as a thinker a wider horizon and a greater mobility than Comte; but on the other hand he stands behind the French philosopher in strict consistency and systematic completeness. —

Stuart Mill's chief work is his Logic. He has here with mastery portrayed the method of the inductive investigator in its finest nuances and has, more than any other logician, come face to face with the real, practical functions of knowledge. It will be difficult to find a counterpart to this work, unless one goes back to Aristotle. What he did for the syllogism, for deductive logic, Mill has done for induction, for the logic of experimental inquiry. Already Bacon and Descartes polemicized against the syllogism and denied its significance as a method of knowledge; but the new logic that Bacon promised could not yet be presented at that time. Just as Aristotle could first set up the theory of the syllogism after reflection and dialectic had been practiced and developed by Socrates and Plato, so the theory of induction could be carried through only after experimental inquiry had labored long and in different fields. And then it also proved that formal
[26] (syllogistic) logic was not enough, but that a doctrine of objective truth and certainty is needed, a "philosophy of evidence", which is not merely analytic and secures against self-contradiction, but really carries knowledge further, enriches it with new content by the way of synthesis.

By inferring one understands in general to derive one proposition from another. But this is, according to Mill, not the original form of inference. Originally one infers neither from the universal to the particular nor from the particular to the universal, but from one particular to another particular. Sense-perception shows us two phenomena (a and b) connected either by simultaneity or immediate succession, and according to the law of association the perception of the one phenomenon (a) afterwards evokes the idea of the other (b). This is the most elementary inference, which is purely instinctive and mechanical, and which is made even by animals and small children. When the child has once burned itself (b) on the hot stove (a), the sight of the stove (a) will afterwards evoke the idea of the pain of burning itself (b), and therefore "a burnt child dreads the fire." — But when the experiences from which the inference is to be drawn are manifold and separated in time, they must be held fast and brought together under a common name; only thereby does it become possible to give oneself a sharp and conscious account of the operation one performs. In place of the elementary inference, which went from the one

particular to the other particular, there now enters a more complex process. First there is set up by induction (in the narrower sense) a general proposition as the expression of the sum of the given experiences (ai + a2 -f- a3 = A), and from this general proposition (A) we then derive the other particular (b) by syllogistic deduction. But this complex process is only another form of that elementary inference: partly the universal is only the sum of the particulars, and partly we have just as much right to draw an inference about a whole class as about a single phenomenon, in so far as it possesses the attributes of the class. The syllogism, the inference from the universal to the particular, is only a test we make, the universal itself is only the sum of the earlier experience, a kind of *[27]* register, a brief formula, which cannot itself be the original starting point.

We see thus association psychology lying at the foundation of Mill's logical theory. But how do we then get beyond the accidental in this foundation? How can real insight and knowledge develop out of the blind, instinctive succession of ideas? Stuart Mill says himself that what men can conceive, and what they cannot conceive, is to a great extent accidental and depends on their experience and habits. By cultivating in particular certain associations of ideas men can make themselves wholly unfit to conceive many things, while on the other hand they can conceive much that again seems inconceivable to others. How can we then be sure that we cultivate the *right* associations of ideas? This logic must necessarily teach us, since otherwise it would not be what it is to be according to Mill's definition, "thi science of the conditions of correct thinking ." But it is easily seen that Mill can set up a concept of the right only by an inconsistency, whereby this becomes different from what is actually accepted. The associations of ideas that have actually arisen could not have formed themselves otherwise, and just as little will one, according to Mill's presuppositions, really be able to alter and "cultivate" them, for whence is this formation to proceed, when in consciousness there are no other factors than the individual ideas, and these work only according to the involuntary laws of association?

According to the common conception, what matters is to hold fast the connections between phenomena that have the character of necessity, or in other words, to order the phenomena according to the principle of cause. But Mill is not satisfied with this answer. By necessity, he says, one commonly conceives a mystical bond that unites things, by cause something that not merely *always precedes* something else, but that directly *produces* something else. Neither of these concepts can, according to Mill, be used by inductive logic. It finds only a train of phenomena, of which some constantly *[28]* occur in union with one another, — the only connection it knows. Of necessity there

can here be talk only in so far as by it one understands *unconditional* connection, in that the one phenomenon is never present without the other also occurring. Of cause there can here be talk only in so far as by it one understands the total sum of the positive and negative antecedents, upon whose occurrence a certain phenomenon invariably also occurs. Cause is therefore always phenomenal, and the question is how we attain the knowledge of the phenomenal causes. — One easily sees that Mill, in his zeal to put aside the inner necessity grounded in itself, does not notice that he merely transfers the difficulties to another place, namely *between* the phenomena instead of in their inner nature. An unconditional connection the empirical-inductive way of looking at things cannot attain, nor in any case can our knowledge resting on associations of ideas. When Mill nevertheless posits such an Unconditioned, it is not merely a logical usurpation; it is also because there operates here, as will appear later, unconsciously a principle that leads beyond his conscious presuppositions. —

It is above all in specifying the ways by which the phenomenal causes can be known that Mill has carried the logic of induction further. Bacon had not got beyond accidental induction, which consists in collecting and summing up the cases that speak for, and those that speak against (the positive and the negative instances); the theory of the experiment was reserved for Mill to set up. And he has done it with such clarity and completeness that a student of nature like Liebig has felt himself aided in his investigations by the study of his Logic.

There are, according to Mill, four methods for empirical inquiry. They are partly methods of discovery, partly methods of proof. We give here a quite brief characterization of them. 1) The method of agreement: When two or more cases of the natural
[29] phenomenon that is to be investigated have only one single circumstance in common, then only this circumstance can be the cause sought (or effect). 2) The method of difference: When a case in which the natural phenomenon occurs, and a case in which it does not occur, have all circumstances in common save one, which occurs only in the first case, then this is the cause sought (or effect). This method leads us by direct experiment with certainty to the cause. Where experiment is not possible, we must content ourselves with the method of agreement, which does not lead us to real causal laws, but for the time being only to phenomenal uniformities. 3) The method of residues: We subtract from the phenomenon the part that by earlier inductions is known as the effect of certain conditions; the remainder of the phenomenon must then be the effect of the remainder of the conditions present. 4) The method of concomitant variations: When a natural phenomenon is changed by a change in another natural phenomenon, it must

stand in causal connection with the latter.

It is not all discoveries that we can immediately make by means of these methods. They all presuppose experiments or at least observations. But natural phenomena are often too complicated for one to proceed directly to investigate them. The operative conditions may be so mingled with one another in the real world that an inquiry advancing by means of the experimental methods would never be able to be done with them. Here the deductive method shows itself as a necessary supplement to the inductive. Deduction presupposes, however, always a preceding induction. The task of deduction is to find the law of an effect from the different factors of which it is the product. But then each of these factors must first have been investigated separately by observation or experiment. From the laws of the effect of the individual factors are then derived the laws of the effect of their combination. This deduction is a syllogism, which can also have mathematical axioms for its premises, so that the effect of the combination *[30]* is found by direct calculation. But the result of deduction must, in order to be recognized as scientific truth, be verified i.e. it must by careful comparison prove to agree with facts that are found by direct observations. Thus Newton's theory of gravitation had to be verified by its leading by deduction to Kepler's laws.

To explain a natural phenomenon or a connection between natural phenomena means to trace it back to some familiar phenomenon. But the explanation really only puts a new riddle in the place of the earlier one; beyond the phenomena we can never get. The essence of nature remains equally mysterious, however far we advance. The highest task knowledge can here set itself is, according to Mill, to reach the fewest assumptions from which the order and coherence of nature can be explained. Natural explanation finds in the answer to this question its definite limit. On the one hand the ultimate laws of nature cannot be less numerous than the qualitative differences between our sensations and mental states. If we have got so far that we have shown a peculiar kind of cause for each of the irresolvable states of consciousness, then we cannot get further. But besides this subjective limit there is on the other hand also an objective limit. There are coordinate causes in nature that we cannot trace back to any common law. We know no law for the distribution of the original natural forces and substances or for the determinate relation that actually obtains between them. The elementary forces stand in different relations to one another, without our being able to discover any rule therein. We know the laws of the operation of the factors, but not of their original union. Thus there is in a kaleidoscope always a regular order among the pieces of glass, and yet the arrangement each time rests only on an accidental shaking.

[31] According to the common conception there is at least one law that holds beyond all experience, namely that everything has its cause, the law of causality. Induction itself, in the sense of an inference from individual cases to a general law, rests on this conception in so far also on the principle of causality, as that which gives thought the right to infer from the particular to the universal, can only be the presupposition that everywhere in nature there is a determinate, lawlike connection. Mill now conceives, as we have seen, induction essentially as an inference from one particular to another particular, which originally takes place as a wholly mechanical and instinctive association of ideas. Experience is thus nothing other than the sum of these associations of ideas with exclusion of the accidental and transient. He cannot therefore recognize the law of causality as an originally operative principle, but regards it as an abstract generalization of all the experience we have (so far) had. An Absolute we could never reach by this way. We find uniformity and lawlike connection in all the individual circles of phenomena that we investigate, and draw from this the conclusion that in *the whole* of nature there must be found such lawfulness. Properly we have a right to say only that it is found in the part of nature known to us. "I am of the conviction," says Mill, "that anyone who is accustomed to abstraction and analysis, and who sincerely uses his faculties, after having sufficiently exercised his imagination, will find no difficulty in picturing to himself that, e.g. in one of the many firmaments into which astronomy now divides the universe, phenomena may follow one another in an accidental way and without any determinate law; nor is there anything in our experience or mental organization that can afford any ground whatever for believing that this is not the case." It is a petitio principii, an assuming of what one was precisely to prove, when one grounds the possibility of experience on the law of causality instead of grounding the law of causality on the reality of experience. To draw the inference "Fire burns" one needs no
[32] presupposition that the whole of nature follows uniform laws; it is enough that there prevails uniformity in the effects of fire — but this uniformity we do not presuppose; we learn it precisely from experience. And as it goes with each single circle of experiences, so it goes with experience as a whole.

The induction on which the law of causality is grounded is not experimental, but consists merely in what Bacon calls inductio per enumerationen simplicem, a direct sum of the individual cases in which the rule has held good, without deduction and verification. If it were a special fact that was at issue, this would be a highly insufficient ground to build on; but the uncertainty in the mode of proof is diminished by the fact that we have here to do with the most abstract generalization, which embraces the

whole domain of our experience. What holds of the law of causality holds also of the mathematical axioms; they too are only inductions from experience. But they concern relations so simple and so frequently occurring that one does not even notice that one is performing the induction. Nevertheless geometry would have been a physical science, if its object could not equally well have been considered in an image or ideal construction as in reality itself, and if it had not had its demonstrative character, a character which, moreover, other branches of natural science gradually also assume. There is thus in mathematics no higher or stricter necessity than elsewhere within our experience. A=C, if A=B and B=C; — two straight lines which have once intersected will always diverge; — such propositions are inductive truths, whose validity, like that of the law of causality, rests only on this, that they have always been found correct and not a single time false. An absolute impossibility we do not know; the ground why we cannot suppose that two straight lines which intersect can converge is therefore only that we have never seen it, A more perfect proof of general truths we do not have.

Concerning these main points, concerning the a priori and a posteriori validity of *[33]* the principle of causality and of the mathematical axioms, Mill has carried on a long and interesting dispute with the man whose work on the history of the inductive sciences according to Mill's own declaration to a great extent made it possible for him to complete his Logic, William Whewell. According to Whewell, who in essentials adheres to Kant's doctrine, every knowledge presupposes not merely that the phenomena present themselves in a certain way, but also that the knower brings along the right idea, the right point of view for their conception. All experience presupposes therefore certain ideas or fundamental concepts. But, says Mill, these ideas are themselves only results acquired by abstraction from experience. When one wishes to express an observation in words, one must refer it to previously acquired concepts. If there is now no concept under which it can be brought, then one must form a wholly new concept as the expression of the new facts. It was an accident that Kepler beforehand had the idea of an ellipse when he studied the orbit of Mars; therefore he could describe and designate it as an ellipse; otherwise he would have had to form this idea by comparison of the phenomena, in order then to apply it to their interpretation.

The logical axioms must share the fate of the mathematical ones; they are just as little as these original principles, but the highest generalizations of our experience. There can thus belong to them no necessity that goes beyond what experience teaches. A necessary proposition would have to be one such that we cannot do otherwise than think it, whose opposite we cannot grasp. But what does it mean that something is

inconceivable to us? It means only that in advance indissoluble associations of ideas have formed in our consciousness, which do not permit us to think it. Every apparently universal and absolute proposition is grounded on such a fixed association. Only by being attentive to the significance of these associations of ideas can one avoid being entangled in subjective prejudices, of which the religion and speculation of all times
[34] afford examples. Therefore it was a benefaction to humanity that James Mill in his "Analysis" carried through the irresistible association of ideas as the principle for the explanation of all mental phenomena. There are facts which in all our experience show themselves connected, and which therefore in our consciousness must also bring about a firm assumption unshaken by any doubt. But on the other hand the history of science contains examples enough that what at one time was regarded as impossible has later proved really to be true. One assumed e.g. in the Middle Ages that it was impossible that there could be antipodes, and that the stars, in order not to fall down, must be fastened to fixed spheres. When we continually see that "inconceivable" things in the course of time become conceivable, then the inconceivability of the opposite of a proposition cannot be a criterion of the truth of this proposition.

Whewell remarks in reply that when one age rejects as unthinkable what another age regards as true, or conversely, this comes from the fact that consciousness continually develops from the more imperfect to the more perfect, a development in which new ideas and points of view continually arise; but this does not shake the truth that the last, most abstract criterion we have is the impossibility of the opposite. Lewes and Spencer also appear here against Mill, although they are otherwise in essentials in agreement with him. Spencer emphasizes in particular (see above p. 14) that without such a criterion our knowledge could not take a single valid step. — Mill's last word is that even if certain relations could be pointed out that in and for themselves are unthinkable to us by our nature, this unthinkable could nevertheless exist. That something is unthinkable can have only a purely subjective significance, unless one, like Schelling and Hegel, would assume that the possibilities of thought and of existence coincide, that there is an original correspondence between the microcosm and the macrocosm; but that is an assumption which could be grounded only by a supernatural revelation. So long, says
[35] Mill finally, as thinkers still so eminent as Spencer and Lewes can regard a speculative necessity, a necessity for thought, as proof of the existence of a real necessity in the universe, so long must it be said that the old metaphysics still reigns in philosophy. Have we the authority to say that there is something God or nature cannot do? Do we then know all the combinations of nature? There is no necessity outside the operation of

nature itself, and this operation we learn to know only through experience.

We do not know what is in itself; therefore all ontology is impossible. Speculative philosophy seeks in vain to establish laws for being in itself. Metaphysics is not philosophia prima but philosophia ultima, the final result of all our experience. Our general ideas contain nothing that has not been put into them by our experiences or our habits of thought. There are no abstract ideas. In the case of compound ideas, which correspond to existing, individual objects, we are able to turn our attention exclusively to single ones of the characteristic marks. It comes thereby to look as if we could conceive them separated from the rest, especially since by signs and words we can hold fast what is similar and oftener recurring. When we e.g. see a white horse, we are able to fix our attention merely on the characteristic mark "white", which is then found again in other objects; and since we have formed a special word for it, we say that it is "the same quality" in all cases. But it is nevertheless always the ideas of concrete phenomena that make up the content of concepts, and we do not think by means of concepts, but by means of concrete ideas and of the names by which we hold fast these ideas. — Mill thus approaches here the extreme nominalism, for which concepts become one with mere names. —

After one has become acquainted with Mill's Logic, one cannot without astonishment hear him declare that the results of this work stand in no necessary connection *[36]* with any of the peculiar doctrines of the two chief philosophical tendencies. For quite certainly this holds for such parts as the exceedingly important one that presents "the methods of experimental inquiry"; but the whole light in which the logical processes are placed, the whole explanation that is given of their nature and ground, confirms nevertheless in full measure what we emphasized from the beginning, that it is a quite determinate doctrine inherited from the earlier empirical school, association psychology, that lies at the foundation from first to last. Association psychology points back in turn to Locke's doctrine of the mind as a blank tablet; only when the mind is conceived as perfectly passive can its essence be exhaustively explained by the laws of the association of ideas. In other places Mill also counts himself in the philosophical school whose chief representative is Locke, while the opposing one is represented by Kant. But he denies that the chief difference between the two schools consists in this, that the one regards the mind as purely passive in knowledge, while the other ascribes to it an original activity. The empirical school too acknowledges, according to him, an original mental element in our ideas and does not regard concepts as mere copies of the impressions but as products of mental labor. But in the same essay in which this statement is

found (Dissertations and discussions III.), Mill points out precisely as Bain's merit that he has led association psychology beyond passive determinism to the acknowledgment of an original activity in the mind. Herein lies the concession that the older empirical school did *not* teach the activity of the mind. And it is a great question whether one of the essential peculiarities of this school is not thereby given up. It is in any case impossible both to hold fast that original activity in the essence of the self and to regard the laws of the association of ideas as the only ones that hold for the life of the mind. The original energy must surely stamp every impression in a peculiar way and must likewise be determinative for the connections in which the ideas enter with one another.
[37] Recognition of an original activity leads us properly from Locke to Kant.

Stuart Mill places the chief difference between the two philosophical schools in this, that the one (the a priori, the intuitive or the introspective school) starts from some of the most compound phenomena of mind as original and believes it has in them fundamental presuppositions about the nature and essence of things, while the other (the experimental or the a posteriori) seeks to reduce the apparently original principles by continued analysis. It is clear that hereby no difference of principle is stated; for both schools would surely agree that one should carry the analysis as far as one can in general carry it. The analyses we find in Spinoza and Leibnitz, in Kant and Hegel can also in clarity and consistency measure up to those we meet with in the thinkers of the other school. And Mill concedes himself that analysis *can* be carried only to a certain point. We stop in the end at states of consciousness that cannot be traced back to simpler and more elementary ones. In particular the sensation of likeness and unlikeness lies at the foundation of all other sensations. Complicated relations of likeness and unlikeness we can trace back to simple and uncompounded ones; but the very faculty of apprehending relations of likeness and unlikeness must constantly be presupposed. Here too we come upon an element that points beyond the empirical, a contribution to knowledge from the side of the mind. The conception of likeness rests on a comparing, a mental activity. We are thus referred back to the activity of the mind. Kant saw this as consisting in a combining of the manifold given to sensation into the unity of intuition and of thought. And the comparing activity points in the same direction; comparison is the condition of combination. All association of ideas presupposes, as William Hamilton has shown[*)],
[38] this comparing; for in order that an idea may be able to evoke another, with which it is wont to go, it must first be recognized, be seen as one that we have had before; and the recognition takes place by comparing. From this it follows again that the association

[*)] Mill acknowledges this. See his note to James Mill's "Analysis" I p. 112 f.

of ideas itself becomes only an elementary form of the activity of the self. But then the principle Mill has laid at the foundation of his logical theory is only a derived principle, and the final explanation is not given; that would be the case only if the logical laws were traced back to that original activity, in which they must have their germ. It is Mill himself who has not carried through the analysis. And when the matter stands thus, we have not merely come beyond empiricism, but also beyond skepticism. Our knowledge is then seen to rest on presuppositions that are given in our mental organization, in the essence of our consciousness, and that it is impossible for us to abolish. The very act of thinking or imagining something always carries with it that the content of thought and of idea is ordered and connected in a certain way; hence the presupposition that there must everywhere be lawlike connection, a presupposition that can be given up only when thinking itself is given up. The necessity we recognize may enter as a link in a greater connection that we cannot survey; but thereby it is not abolished.[*)] This presupposition of a lawlike connection is therefore found in all men and in all times, even if only through the more recent science of nature it has received its full confirmation and secure execution. Also in the mythological ideas, even in the wildest superstition there lies at the ground the conviction of order and connection.

By going back to the presuppositions we have thus found Mill's fundamental error. *[39]* In this way criticism acquires greater significance than when one, as is for the most part the case, argues from the skeptical consequences that may be drawn from Mill's doctrine, consequences that Mill's supple dialectic could moreover make harmless. By directing the criticism against the presuppositions we gain at the same time the advantage that it becomes possible for us to maintain the great significance of Mill's Logic (cf. above pp. 25 and 28). It does not do justice as an exhaustive presentation of the process of knowledge; but when the one-sidedness and relativity of the standpoint is seen, one must admire the energy and the acuteness with which the tasks are treated. A presentation that anxiously strove for correctness and completeness with regard to first principles would perhaps hardly be able to penetrate so deeply into the essence and forms of concrete knowledge as Mill from his standpoint has been able to. —

What brings Mill to leave the original presuppositions of association psychology is that he has got his eye on the concept of selfhood, of subjectivity. As this concept presses forward, it brings unrest and contradiction into the empirical presuppositions.

[*)] When Stuart Mill thinks that one could well imagine a world where two and two were not four but five, then one has rightly answered to this that in that case it would not be 2 + 2 that was = 5, but 2 + 2 + 1, the 1 being due to the circumstance by which the constitution of that world differs from ours. See Mansel: The philosophy of the conditioned p. 131.

In his specifically psychological investigations Mill comes still nearer to this concept than in his Logic. To these we now turn, in that we first set forth his conception of psychology in general.*)

Mill maintains, as already mentioned, the independence of psychology as a science. It is not merely a part of physiology. That every mental state has a certain nervous state as its immediate condition and nearest cause cannot be said to be demonstrated in the
[40] same strict sense in which it is demonstrated as regards the sensations of sense. In any case we do not know the essence of these nervous states, nor their relation to the mental states; we are therefore restricted to studying these latter directly. Psychology has for its object the original or derived laws according to which one mental state follows upon another. To be sure, there can here in particular cases be no question of exact insight; we can find the fundamental laws and the fundamental conditions, but these are modified in the individual cases by the individual circumstances. Mill compares psychological knowledge with the doctrine of ebb and flood; here too the main causes (the attraction of the sun and the moon) stand fast and can be explained and predicted; but there is a multitude of secondary factors (the direction of the wind, local circumstances, the character of the bottom of the ocean etc.), which each depend on particular laws, and which exert considerable modifications. — We know already that the laws of the association of ideas are, according to Mill, the fundamental laws of psychology. In order to find these, one must, as in natural science, apply a double method: partly the facts must be traced back to laws, these in turn to more general laws, and so on; partly the compound phenomena must be resolved into single and elementary ones. The first method has its analogy in Newton's discovery of the law of gravitation as explanation both of the motion of the heavenly bodies and of the motion of falling on the earth; the second has its model in chemical analysis, by which substances are resolved into their constituents. But when one has thus traced a mental phenomenon back to simpler and more elementary phenomena, by whose combination and association it has arisen, then it is not, as Hartley and James Mill supposed, enough to study these elementary phenomena; one cannot deduce from them the nature of the higher, more compound phenomenon, any more than one can deduce the properties of water from those of oxygen and hydrogen. — Proper psychology is an empirical science. But from the general laws to which it leads one can find by way of deduction how the human character will
[41] form itself under certain determinate physical and moral conditions. Psychology then passes over into ethology, the doctrine of human character. There can of course be no

*)In the Logic the method of psychology is dealt with; the other investigations are found especially in "Examination of Sir William Hamiltons philosophy" and in the notes to James Mill's "Analysis".

question of predicting determinate facts; but from the rightly known psychological laws one can derive what inclinations and strivings will appear under certain circumstances. In order to acquire validity, the results of this deduction must be verified, shown to agree with actual observation. — On psychology and ethology sociology finally rests, the doctrine of human society. This too is a deductive science. After an investigation of each in particular of the factors that intervene in social life and there exert their influence through the general psychological and ethological laws, the united operation of all these factors is to be determined. The combination can here often become so complicated that the deduction cannot be carried through, just as physics cannot solve the problem of the mutual action of three bodies gravitating toward one another. Sociology must therefore sometimes be inversely deductive i.e. instead of beginning by deducing from the psychological and ethological laws, it must begin with deriving an empirical law from historical and social facts, in order thereupon to find a deeper grounding of this empirical law in human nature. The idea of the progress and development of humanity is an example of such an empirical law, which in order to become a rational law, a causal law, must be seen in its origin in human nature itself.

One might miss ethics in this survey of the sciences of mind, and it has sometimes been believed that Mill recognized no other ethics than ethology, the doctrine of the development of characters. But this is a misunderstanding. According to Mill ethics is essentially an art, a part of the art that corresponds to the science of human nature and human society. The peculiarity of art in contrast to science is that it speaks in the form of rules and precepts, not in the form of statements of facts. Art sets itself an aim *[42]* as desirable, defines it and hands it over to science, in order that this may investigate its causes and conditions. The doctrine of the ends and the general principles that can be derived from them constitutes teleology or what the German philosophers call the principles of practical reason, an art of living, which consists of three parts: ethics, politics and aesthetics, — the doctrine of the right, of the expedient and of the noble and beautiful. By means of this art a guiding rule is won for the judgment of all aims and objects of our drives.

The difference Mill thus sets between ethics and ethology necessarily presupposes a factor in the mind, whereby it can raise itself above the psychological mechanism that association psychology teaches. To understand the transition from psychology to ethics we must consider the concepts of the self and of the will.

It is a presupposition Mill has in common with positivism, that we know only phenomena; we know nothing in and for itself, the mind in itself as little as matter. The

Scottish school started from common sense and its instinctive assumption of an external object as the cause of our sensations. But "common sense" is something far too combined for association psychology to be able to recognize it as something original that cannot be subjected to analysis. In the assumption of external objects independent of us there lies really nothing other than the assumption that, besides our actual, present sensations of sense, there is given a real possibility of many other sensations, which could occur under certain conditions. Things are nothing other than permanent possibilities of sense-impressions. For us they stand as more than possibilities, because we involuntarily apply the concept of substance and of cause, which has validity only within the series of phenomena, to the very possibility and ground of this series. And the idea of
[43] this real substance gains in strength when we notice that not only we ourselves, but others too proceed from the presupposition of its existence. — Stuart Mill thus adheres (like James Mill) to Berkeley's idealism and regards it as an illusion when one thinks that a material substance is necessary to bear the phenomena, just as the Indians thought that the earth needed a point of support and therefore rested on an elephant. As he follows Berkeley with regard to the concept of matter, so he seems to follow Hume with regard to the concept of mind. The mind is only the train of our actual and possible sensations. It differs from the train that constitutes matter in that it also includes the ideas that are not confirmed by experience, and all our thoughts, feelings and resolutions, but especially in that this train is restricted to ourselves, each for himself, and is not, like that, common to all men under the same circumstances.

This renewal of the phenomenalism of Berkeley and Hume is a necessary consequence of association psychology. As this doctrine in the last century called forth Reid's appeal to common sense and to common morality, so it has now also aroused fear of absolute skepticism, and Mill has thought it necessary to demonstrate that the proofs of the existence of God and the immortality of the soul are "just as good" according to his doctrine as under the usual presuppositions. For us it is of the greatest interest* to see how Mill here too quite definitely goes beyond his own presuppositions and demonstrates their insufficiency. Immediately after (in the work on Hamilton) having given the stated explanation of the concept of the self he declares, namely, that this explanation does not suffice, that it in particular does not comprehend phenomena such as memory and expectation. "When we therefore," says he, "speak of the mind as a train of sensations, we must add, a train of sensations that is conscious of itself as past and future. And we stand then at the dilemma either to assume that the self or the mind
[44] itself is something different from the train of actual and possible sensations or else to

assume the paradox that a train of sensations can be conscious of itself as a train." The self and memory, he says in his notes to James Mill's "Analysis" (where one will on the whole find the clearest and sharpest expression of his psychological view), are only two sides of the same fact: without memory no self, and conversely: without self no memory. With right Mill calls it a paradox that a "train" should be able to be conscious of itself; but when this is so, what becomes then of the definition of the mind that Mill and association psychology assume, that it is a train of sensations? Is it then not necessary to seize the first alternative and assume that the mind or the self does not coincide absolutely with the train of sensations? This Mill also seems to do when he declares that the bond that holds the train together is just as real as the individual sensations that form the train, and is not a mere product of thought, and that we have here an original element that has nothing in common with any other thing whatever and therefore must be designated by its own name. When he also declares that we stand here before an insoluble riddle, then one must nevertheless remark that he himself in an artificial way has to a great extent produced this riddlesomeness by fixing a definition of the essence of the mind, of which he immediately afterwards must concede that it does not hit the real kernel. — It is not easy to understand how Mill has been able to be accused of materialism; for it is clear that in so far as he lets himself be driven from his empirical-skeptical standpoint, he must precisely go in an idealistic direction. Proceeding from empirical psychology he shows us the necessity of a psychology that, as it has been since Kant the task of German philosophy, develops the central concepts of mental life, especially the concept of self-consciousness. And an inner connection between the two lines of investigation will become possible, if it can be shown that the whole system of mechanical processes that association psychology presents is a serving foundation and *[45]* means for the development of self-consciousness. —

In close connection with the concept of the self stands that of the will. With regard to the conception of this concept Mill has a support in his logical theory, which he applies here in an interesting way. He denies, as we have seen, necessity and puts in its place fixed and uniform sequence. It seems to him that by necessity one commonly understands a mystical power that from without overwhelms the individual will. If necessity is conceived in this way, the doctrine of necessity (determinism) becomes fatalism, as among the Mohammedans, according to whose belief the predestined will happen whatever one does to prevent it, and as in Owen, according to whose doctrine man's character is formed for him and not by him. Mill therefore wishes preferably to abolish the expression necessity. Every action presupposes as its condition earlier states

of consciousness (thoughts, feelings and drives), without which it would not have come to be. Effect follows here upon cause just as regularly as in the physical domain; but of inner, mystical necessity there is here just as little talk as there. We can ourselves develop our will by applying the laws of the association of ideas to procure for the nobler motives growing power. Originally the action is determined by pleasure and pain; but by the power of the association of ideas there becomes gradually the means an object of our desire without regard to the original end: the action is then willed in itself, quite apart from our finding pleasure in what it procures for us. The difference between a bad and a good man does not consist in this, that the latter acts against his strongest inclinations, but in this, that his striving to act rightly and his abhorrence of the wrong are strong enough to keep every other drive in check and bring it to silence. Since now such a mental state is possible, men are fitted for self-education and moral guidance. Self-education is everyone's moral duty. A necessary means to it is that thought forms
[46] for itself a clear standard of right and wrong, in order that moral drive and aversion may work in the right way. — Mill's doctrine shows clearly enough also on this point beyond his original presuppositions. For how can the concept of self-education acquire reality, if the self is not conceived as an original energy that is able to penetrate and develop the given conditions (impressions and ideas) and guide the association of ideas in a certain determinate direction? —

The question of the freedom of the will was one of the points in which Mill differed from the acute Scottish philosopher, against whom he has directed one of his most important works, William Hamilton, in whose doctrine the free will in the sense of absolute freedom of choice plays a chief role, in that it, and the moral responsibility conditioned by it, was in his conviction the only foundation on which the belief in the existence of God could be built. But there are also other points of Mill's polemic that we here must bring forward for the characterization of his standpoint. Hamilton maintains energetically the relativity of knowledge; the Absolute and the Infinite we cannot think, because our thought cannot conceive that which is complete in itself, and which has no limits. Although Mill naturally must be at one with Hamilton in the maintaining of the relativity of knowledge, yet he polemicizes against this motivation. It is, he thinks, pure abstractions Hamilton fights against. *The* Absolute and *the* Infinite is in itself meaningless. If the Absolute really existed, it would have to possess all possible predicates in the fullest extent: it would have to be absolutely good and absolutely evil, absolutely wise and absolutely stupid, absolutely powerful and absolutely weak, in short, it would be self-contradictory. When Hegel nevertheless has set up such a concept, he has thereby

only earned the merit of having dissolved speculative metaphysics by a series of reductiones in absurdissimum. — It is clear that Mill has not at all understood Hegel's thought or at all had an eye for the problem that lies in the concept of the Absolute. His strength lies, on the whole, in the treatment of individual, concrete questions; he does *[47]* not gather the individual philosophemes into a total view.[*)] He can without feeling any intellectual want let knowledge end in an accidental plurality, and in so far as he raises the question of the reality of the idea of God, this question does not stand in connection with his proper philosophizing. The intellectual drive that does not rest until it can get the scattered threads connected, or at least see them converge, this drive is foreign to him. His empiricist and prosaic way of thinking, which, as one has reproached him,[**)] does not feel "the mystery of life", regards it as possible, even if he himself does not seem to follow this way out, to settle down to rest in a deism, where the supernatural is relegated to "the beginning of the world", and where the Deity as with Epicurus lives in indifferent remoteness from the world. On the contrary it has been the chief problem of philosophy from its first days to seek an unconditioned principle as ultimate explanation and reconciliation of the oppositions of existence.

Mill thinks that in place of *the* Absolute, *the* Infinite, one should put something absolute, *something* infinite (an absolute and infinite being), the concrete in place of the abstract, and he does not regard it as impossible to idealize the highest qualities we know, and thereby reach a relative knowledge of the nature of God. At least he maintains this possibility against Hamilton in order to cut off the theological consequences that the latter drew from the impossibility of knowing the Unconditioned. One notes that Mill here has come into a domain where he is not at home. From Hamilton's stand- *[48]* point he has been aptly answered[*)] that "something Absolute," "an absolute Being" is a self-contradictory concept for us, since every "something," every "being" we know is relative and finite, so that the added word "absolute" leads us beyond the limits of our knowledge.

It is, by Mill's own declaration in his Autobiography, not so much theoretical as practical motives that led him into conflict with Hamilton, in whom he saw the most significant representative in England of the philosophical tendency opposed to his own. "The difference between the two philosophical schools, the one that rests on intuition

[*)] "It is the full, the whole vision that he lacks; the great capacity of his mind unfolds itself upon objects that after his treatment of them continue to be just as isolated as they were beforehand; they are not brought to unity and harmony with one another; the philosopher's hand is still always needed with regard to them." Quarterly Review. July 1872. p. 81.

[**)] Ibid. p. 117.

[*)] *Henry Mansel*: The philosophy of the conditioned. p. 115.

and the one that rests on experience and association, is not merely a matter of abstract speculation; it is full of practical consequences and lies at the root of all the greatest oppositions in practical views in an age of progress. The practical reformer must constantly demand changes in things that are supported by powerful and widely diffused feelings, or doubt the apparent necessity and immovability of existing facts; and it is often an indispensable part of his case to demonstrate what origin these powerful feelings have, and how these facts came to seem necessary and immovable. Therefore there is a natural enmity between him and a philosophy that sets aside the explanation of feelings and moral facts by circumstances and associations of ideas and prefers to treat them as original elements of human nature, a philosophy that has an inclination to maintain favorite doctrines as intuitive truths and to regard intuition as the voice of Nature and of God, speaking with a higher authority than our reason." One hardly errs when one finds in this utterance the deepest motive of Stuart Mill's whole standpoint. But as to
[49] the matter itself, it must be remarked that Mill here characterizes the "intuitive" school as though the Scottish school were a worthy scientific representative of it, and that one need only mention names like Spinoza, Kant and Fichte to demonstrate at once the unwarrantedness of Mill's assumption that only the empirical school should represent the philosophy of freedom of mind and of progress.

But in Hamilton Mill combats not only the "intuitive" philosophy, but also theology, supernaturalism. Hamilton's polemic against the philosophy of the Unconditioned (Schelling and Hegel) had, namely, as its background a moral-religious faith that was not supposed to be able to find any expression or any foundation through knowledge, because its object is the Incomprehensible, that which is absolutely exalted above everything human. Against this doctrine Mill expresses himself thus: "If, instead of the glad tidings that there exists a Being in whom all the excellences which the highest human thought can conceive exist in a degree inconceivable to us, I am told that the world is governed by a Being whose attributes are infinite, without our being able to understand what they are, any more than what the principles of his government are, except that 'the highest human morality which we are capable of conceiving' does not sanction them, — convince me of that, and I will bear my fate as well as I can. But when one tells me that I am to believe this and at the same time to call this Being by the names which express and affirm the highest human morality, then I say in plain words that I will not. Whatever power such a Being may have over me, one thing there is that he shall not be able to do: he shall not compel me to worship him. I will not call any being good that is not what I mean when I apply this predicate to my fellow creatures; and if such a Being

can sentence me to Hell because I would not call him so, then I will go to Hell."*)

It is only through the reading of the Autobiography that one gets a complete ex- *[50]*
planation of the energy and the bitterness with which Mill expresses himself. One sees from it that he was early led by his father to the conviction that the belief in a Providence was not only theoretically untenable but also morally reprehensible, because it necessarily veils all the evil and all the corruption that is found in the world, indeed even leads to the worship of a Being who, knowingly and willingly, has created such a world! — The only religious faith that is possible under such presuppositions must be a practical faith; it must have its object before it and not behind it, in possibility, not in reality. Stuart Mill seems, though he nowhere states himself clearly in his own name on these matters, to side most nearly with those who, "though they cannot believe that the world can have a Creator and Ruler who possesses absolute power and perfect goodness, yet have that which constitutes the real value of all possible religions, an ideal conception of a perfect Being, toward which they constantly fix their gaze as the guide of their conscience; and this ideal of the Good is, in general, nearer to perfection than the objective Deity of those who consider themselves obliged to find absolute goodness in the Creator of a world so filled with suffering and so disfigured by injustice as ours." — It is a question whether Mill escapes the difficulties by putting a subjective idea of God in the place of an objective one, and whether on the whole an ideal practical striving, as he demands it, can be possible, if the reality from which every striving must after all proceed, and in which every possibility must have its point of attachment, is so devoid of ideas that the Manichaean dualism, according to what James Mill taught, should be the only morally defensible view. But in any case Mill here points to an ideal that cannot be explained by the working of the association of ideas but points back to deeper sources, sources which Mill in so many hints has opened for us, but only to stop them up again at once. It is interesting to see how in his practical conception of the *[51]*
Deity he meets with I. G. Fichte, whose idea of God was the moral world-order, realized by free action. Fichte is perhaps the one among the German philosophers with whom Mill sympathizes most; but Fichte is more consistent than he, in that he has seen that practical ideality necessarily presupposes theoretical ideality and cannot be attained by a purely empirical road. —

As Mill in general in his philosophical view builds on the earlier English inquiry, while nevertheless often departing from it more than he himself notices, so it is also with regard to ethics. Mill's ethics is Utilitarianism, "morality grounded on the prin-

*)Examination of Sir William Hamiltons philosophy p. 103.

ciple of utility or happiness." This principle appears in English philosophy already in Bacon, whom Macaulay, as is well known, has presented as the prophet of the useful. Richard Cumberland (in the seventeenth century) seems[*)] to have to be reckoned as the real founder of utilitarianism; according to him all moral laws can be reduced to the one: striving after the good common to all rational beings, whereby our own good is promoted as a part of the whole, so that the individual's road to his own welfare is everyone's road to the common welfare. Yet in Cumberland the individual regard is entirely subordinate to the regard for the universal, for society. When Locke's philosophy had broken through, and all knowledge was conceived as resting on sense-perception, ethics too was founded on the drive toward felicity, on one's own interest. Whewell (History of Moral philosophy in England) remarks that this doctrine agreed with the national way of thinking, and Tocqueville shows that it is the natural one for a democratic commercial people like the American. To this it may be added that it can very well
[52] be brought into connection with theological points of view. So in William Paley, whose ethical work (published 1785) was made the basis of instruction at the University of Cambridge right into this century. Paley, who in his youth had won the prize for a treatise in which he placed the Epicurean morality above the Stoic, taught that one ought to do what is useful, because it is God's will, and because it is necessary to salvation. The individual interest he supported by the hope and the fear that religion calls forth. But the theory of utility was secularized and thereby at the same time first properly carried through by the famous jurist Jeremy Bentham († 1832). Bentham's importance lies no doubt nearest in the field of practical reform, and he has a special merit in his polemic against the many subtleties and the traditional formalism that made English law a perfect chaos, where the most shameful abuses could thrive. But his very tendency toward reform had its ground and its support in his energetic and methodical thinking, which sought to deduce from the principle of utility norms for the judgment of existing laws. It is from Bentham that Mill's ethical and social views have their origin; in his youth he was absorbed to such a degree in Benthamism that he embraced it with a sectarian's zeal. True, he later rectified several points in this doctrine, but he has not arrived at any clarity about the difference between his own and Bentham's conception.

There lies in utilitarianism the possibility of a double point of departure and center of gravity: one can lay the emphasis on the egoistic interest and show how this, for its own sake, must enter into a harmonious relation to the interests of others; and one can start from sympathy and the individual's relation to the larger whole and show how

[*)] Cf. *Hallam*: Introduction to the litterature of Europe. (7th ed.). IV. p. 160.

the egoistic interest is only a subordinate element within this. As already indicated, Cumberland goes the latter of these ways, Locke and Paley the former. The relation between Mill and Bentham rests likewise on the fact that they each go in their own direction, conceive the same principle from two different sides. According to Bentham every human being follows in each of his actions his own pleasure and interest. Self- *[53]* sacrifice consists only in giving up a lesser pleasure for a greater. But the happiness of one cannot be separated from that of another; everyone's well-understood interest must therefore lead him to work for the happiness of others. Hereby arises what Bentham calls the ethical. "Do not dream," says he (Works I. p. 27), "that people will move their little finger to serve you, when their advantage in doing so does not stand clear before them. But they will wish to serve you, when they perceive that by doing so they can serve themselves. In these mutual services consists virtue."[*)] Bentham assumes that sympathy is indeed an original factor in human nature; but he does not consider it strong enough to bear the ethical. Stuart Mill differs from Bentham precisely in the weight he lays on the sympathetic feelings as a vehicle for the development of the ethical. In Bentham, who essentially held to the egoistic interest, virtue became one with prudence and outward rectitude. He also does not emphasize the wish for self-education, for the ethical cultivation of one's own personality, but regards man only as a business being, understands only "the business part of human affairs." In Mill, on the other hand, the egoistic interest is not merely subordinate to the relation to others but also to the ideal need of self-development. Already at the end of the Logic he expresses himself in a way that seems to point beyond the "theory of utility": "I fully admit that the cultivation of an ideal nobility in will and action ought to be an end for which the particular striving after one's own and others' happiness (insofar as it is not included in this idea) ought in every case of collision to give way. But I believe that precisely the question: wherein consists this loftiness of character? — must be decided by going back to happiness as the standard. For the individual the character itself ought to be the highest aim, because such an ideal loftiness or an approximation to it will more than anything else contribute *[54]* to making human life happy, both in the comparatively modest sense of enjoyment and freedom from pain, and also in the higher sense that life does not become what it now almost commonly is, childish and meaningless, but becomes such as human beings of more highly developed faculties could wish to lead."

It is a false idea that one forms of the morality of utility when one thinks that it must necessarily be a low and finite way of looking at things. Bentham and Mill are

[*)] One is here reminded of the task that Carlyle set the utilitarians: "Given a world full of scoundrels, to show how virtue results from their united endeavors."

enthusiasts, passionately inspired by the progress of humanity. They consider a condition possible in which universal happiness prevails, and in this they represent the most complete opposite to Schopenhauer's pessimism. But their optimism is not, as optimism so often is, insipid and superficial; it has for its presupposition a deep knowledge and an inward confidence in human nature; — it is also not conservative, does not hold, like the vulgar optimism, that all is good as it is, but consists essentially in the belief that all can become good, however far it now is from being so, since nineteen-twentieths of the human race, even in those parts of the world now existing that are least deeply sunk in barbarism, live in misfortune. The present wretched education and wretched social order are the only real obstacles to a happy life for all humanity, i.e. "an existence consisting of few and transient sufferings, many and various joys, with a definite preponderance of the active joys over the passive, and having as its foundation for the whole this: not to expect more from life than life can offer." The higher intellectual and moral enjoyments will become more and more accessible to all. And in any case there lies in the very struggle against misfortune and in the interests and feelings that this struggle calls forth, a noble satisfaction that stands high above any egoistic enjoyment whatsoever.

[55]

What is peculiar to the theory of utility, as Mill conceives it, is that it presupposes the ethical instead of grounding and developing it. According to Mill the point of dispute is not whether one ought to act rightly, but what the right is; and that, he thinks, only the theory of utility can teach. But the properly ethical is not a "what," but precisely a "that;" the relation of obligation itself is the point at which all particular tasks, all virtues and duties must have their point of attachment. Only through its connection with this central point does something become good in the ethical sense. The theory of utility, on the other hand, holds to the peripheral, to the content and effect of actions instead of to their inner, personal character. Mill even says that in this he entirely agrees with Bentham, that the motive has nothing to do with the moral worth of an action, though it has very much to say with regard to the worth of the agent. But can one really thus regard the judgment of actions and of the acting persons as two different things? The action may be useful without the person therefore being morally upright. A good and noble character is not something that can be regarded as a supplement to the ethical in the action; on the contrary, without an understanding of the character and the personal qualities no judgment at all can be passed on the morality of the action; — therefore moral judgment is so exceedingly difficult. On the other hand utility and happiness, ideally conceived, point back to the personal development of character; indeed, there is,

as we have also heard Mill himself declare, but as he in his own definitions of concepts for the most part forgets, no true utility or happiness outside of this. If Mill did not at bottom conceive the matter in this way, — and so here, as in the Logic and the Psychology, went beyond his own presuppositions, — there would arise a dangerous enemy for him in the pessimism of Schopenhauer and Hartmann, which is the true consequence of the distinction between happiness and task, between "what" and "that." But both pessimism and utilitarianism separate what ought not to be separated. "The justification *[56]* of the individual and of the race rests only on their peculiar end and task, through the solution of which their own nature is developed, and only in this development itself can happiness and satisfaction be sought… The eudaemonological and the ethical stand in an inner connection, and the significance of pessimism lies in demonstrating indirectly the necessity of this unity."*)

The different points of view that thus assert themselves in Mill must naturally entail obscurity and vacillation in the definitions of concepts. He declares, for instance, that "the soul is not in a healthy condition, not in the condition that agrees with the useful, when it does not love virtue for its own sake," — but adds in the same breath that actions and plans are virtuous only because they promote another end than virtue. To the question: is virtue a means or an end? Mill has no decisive answer. At one time it is said that it ought to be desired for its own sake; at another, that the utilitarian moralists "place virtue at the head of the things that are good as a means to the final end;" at another, that it is or can become one of "the constituents of happiness," — "a part of the end," indeed even "a more important part of it than any of the objects to which it is a means"!**)

From the Autobiography one sees that these dialectical difficulties in Mill's own life led to a crisis, which he ascribes great importance for his mental development. As an eager Benthamite, by his own admission even a fanatical one, he was enthusiastic in his youth for the spread of utility and happiness in humanity. But — he came to ask himself — would you really feel yourself happy, if all your ideals were realized? — and he had to answer this question in the negative. A long period of melancholy and despair followed *[57]* upon this No. At last he gained new courage and new strength through the conviction that happiness, though it is the aim of life, can yet be attained only by not making it a direct aim; only those are happy who make something other than happiness their ideal end; happiness they then find on the way. "As soon as you ask yourself whether you

*)"Philosophien i Tydskland efter Hegel." p. 285-286.

**)*Stuart Mill*: Moral grundet paa Nytte- eller Lykkeprincipet. Translated and introduced by G. Brandes. p. 46-48.

are happy, you will cease to be so."*)

It cannot be demonstrated more clearly that the principle of happiness points beyond itself, is only a relative principle in the ethical respect, and that it can therefore not be laid as the foundation of ethics. Mill has confused the psychological point of departure, the educative means, with the ethical end. But his strength lies on the other hand precisely in showing how this educative means works. The feelings of pleasure and displeasure are the original motives for all human activity and action, and Mill shows now, by a pertinent application of association psychology (an application in which he has Hartley and James Mill, indeed really already Plato and Aristotle, as predecessors), how man by the working of these very motives is led step by step to set himself higher and nobler ends, to abandon egoistic limitation and to take up the universal, humane points of view into his motives. The interest of society gradually displaces the individual interests, and there will in time even be able to form so strong a feeling for the universal that one may come to fear that it will check individual development. The association of ideas between the feeling of duty and utility, supported by the natural force of sympathy, will be able to produce a psychological power and a social efficacy that exceeds even the greatest influence that has been exercised by a positive religion.

Mill begins in his ethics as an Epicurean and ends as a Stoic. A possibility of uniting
[58] the conflicting points of view lies in the idea which in so many places emerges in him, but which he does not lay as a foundation, the idea of development. Only through it can his philosophy be freed from its inner contradictions. At bottom it is thus not happiness that is Mill's ethical principle, but happiness developed to its ideal, where it is one with the ethical character. It is this development itself that is the ethical task, and whose necessity grounds the relation of duty. The ethical motive is striving after ever higher development, a development in which the individual and the cultural-historical tasks stand in inner connection and interaction with each other.*)

Utilitarianism is empiricism in the ethical domain. In the theory of knowledge empiricism found its expression in the conception of the human mind as originally passive; with the recognition of the original activity in the individual empiricism and association psychology therefore dissolved. In ethics it finds a corresponding expression, in that desire, "the passive state of receptivity," as Mill defines it, is taken as the point of departure, while the will, "the active phenomenon," is regarded as "a shoot from the stem of desire."

*)Autobiography p. 142.

*)A hint in this direction, in the direction of letting the idea of utility merge in the idea of development, is found in Mill in his work "On liberty" p. 24: "I regard utility as the ultimate standard in all ethical questions; but it must be utility in the *most comprehensive sense, grounded on man's permanent interests as a progressive being*."

But how can an activity develop out of a passive state, and must not that recognition of the original activity also have consequences with regard to the foundation of the ethical, so that the Stoics, also as regards the original point of departure, are proved right against the Epicureans? —

It has earlier been indicated that Mill's whole theoretical standpoint has its ground in his practical enthusiasm, his zeal for progress and development. This zeal shows itself *[59]* clearly also in his ethics; it is perhaps his impatience to get to the practical tasks that makes us in his ethical definitions of concepts often have difficulty in recognizing the great logician. But above all, of course, the practical enthusiasm comes forward when we come to the social science itself. In few or none in our century has there stirred a stronger interest in humanity and progress, combined with so superior an intelligence and such varied knowledge. Mill is not merely a philosopher, but also has a name as an economist. His ethical ideals do not float in the air, but are grounded by sober investigation of the real conditions. The sharpest, prosaic understanding has led him to consequences that seem to the accustomed way of thinking overstrained and fantastic. Without being able here to go more closely into the practical problems with which Mill has occupied himself, we must nevertheless briefly show the connection between his treatment of them and his general philosophical standpoint.

The social science is, according to Mill's Logic, subject to the same methods as natural science: the results of induction form the foundation for a deduction whose results are in turn confirmed by direct experience. Mill therefore does not start from dogmatic presuppositions, but seeks to find definite points of departure in experience. He here often expresses himself quite skeptically. If there is question, e.g., of woman's position in society, he does not start from certain ideas of woman's nature, but even declares that we do not at all know it. Women have hitherto lived under certain restrictions, indeed even under direct compulsion; what is called their nature is in the highest degree an artificial product, the result of a forced pressure in one direction and an unnatural excitation in another direction. Certain of their faculties have always been developed by the power of circumstances, while others have withered and apparently died out for lack of nourishment and care. As long as ethology is still in its infancy, as long as one still has *[60]* so little knowledge of the laws for the formation of character and of the ways in which external conditions here intervene, so long at least can no positive proof yet be adduced that the intellectual and moral differences between men and women are grounded in nature. Only that which cannot be explained by education and external circumstances has one a right to call natural; how far-reaching an influence these circumstances can

exert, one does not yet know at all.*) On the other hand the whole historical development consists in a progressive abolition of the right of the stronger, which for so long periods was the sole and unconditional rule in all relations of life. Through this liberation from external compulsion, which is the greatest peculiarity of the modern world, it becomes possible for individuals to develop their individuality without being stopped by artificial barriers. The exclusion of woman from the rights and the roads that stand open to men is only a remnant of that brutal power which is now combated in most fields.

With the abolition of the right of the stronger every external authority will gradually fall, every power that would set itself up as guardian over individuals instead of letting them fight the battle of life with their own hands and on their own responsibility. According to the old view it was believed that the individual would go astray when left to himself. But the modern view teaches that the affairs in which the individual alone is interested will not go well, except when they are left to his own direction, and that the intervention of authority only does harm when it is not precisely a matter of protecting the rights of others. In the treatise "On Liberty" (one of Mill's clearest and most beautiful writings, of which he himself also thought that it would last longest of all his works) this thought is developed further. A sound intellectual and moral development
[61] is only possible on condition of freedom; when society, be it democratic or aristocratic in its constitution, wants to extend its influence over both the mental and the bodily life, when it seeks to lead individuals into certain directions of life, to instill in them certain definite opinions, then the development of character is checked, and higher independence and peculiarity become impossible. Therefore Mill demands absolute freedom for thought and speech and for the laying out of the plan of life as a whole. Only with regard to actions that may affect the welfare of other people can barriers on individual freedom be justified. If this rule is not followed, the result will be a pervading mediocrity; men will become dwarfs, and one will soon learn that with little men nothing great can be accomplished. The danger is especially great in democratic states, since public opinion, which in them becomes the ruling power, reaches far deeper and more imperceptibly into the mental life than external statutes and barriers set by force. Mill's endeavors therefore aim at finding political means to assert the rights of minorities. But the most powerful means he seeks in a reform of public opinion, an absolute, and not merely external and formal recognition of the right of personality.

One must not conclude from this that Mill regards the role of the state as played out,

*)Kvindernes Underkuelse. Translated by G. Brandes. p. 37-40.

so that everything could now be left to individual striving and competition. He disputes such views as Buckle's, which derive all evil and error in history from the influence of governments. He maintains in his "Political Economy" that there is a great mass of tasks that concern the interests of humanity and of future generations, or also those members of society who need external help, — tasks that cannot be solved except by the power of the state. The state ought not only to provide for legal security and exercise control and arbitration in the mutual affairs of individuals; it ought also to intervene where either neglect on the part of individuals may occur, as in education and instruction (only that it must not make this a monopoly), or where the powers of individuals do not suffice (poor *[62]* relief, colonization). There can, in his conception, be fixed no definite limits here; one must keep to the general rule that the intervention of state power is permissible only where its utility is evident. And at the same time state power ought always to work in such a manner that the individual powers are not pushed back, but on the contrary are developed and educated through its measures, so that government assistance becomes "a course of instruction for the people in the art of solving great tasks by individual effort and voluntary cooperation."

Brought up and trained in the school of Bentham and James Mill, Stuart Mill was from his first appearance an enthusiastic democrat. His political faith later underwent a double modification. In part he soon came to think that democratic development might entail danger to individual development, that minorities would easily be oppressed; this fear he already expresses in his article in the Edingburgh Review on Tocqueville's book "La démocratie en Amérique," and he came back later, as already shown, to it in the treatise on liberty. But in part he also saw that the social question was more important than the political. Earlier he had with the older political school regarded the right of property as something fixed and absolute; but gradually he was led more and more to see that it, like every right, is conditioned by social relations. The right of property also could not according to his whole philosophical view be a dogma, from which one must necessarily proceed. It is an institution, which has arisen in consequence of the natural course of things, and which has its great advantages, but which nevertheless in and for itself cannot lay claim to absolute validity. Therefore Mill judges more favorably of the communistic and socialist systems (especially Fourier's) than the economists are accustomed to do, just as he finds it natural, that communistic ideas have spread in a time like ours, "where a general examination of all first principles is recognized as un- *[63]* avoidable, and where for the first time in history the most suffering classes of society have a voice in the inquiry." Most of the difficulties that criticism can point out in the

socialist systems apply, in his opinion, perhaps in still higher degree to the present conditions. When one says, e.g., that under a socialist constitution everyone will shove as much work as possible onto others, because he is not particularly interested in it, Mill answers that the same must hold of nine tenths of present labor: how small a part of what is produced in England is produced by men who themselves reap the proceeds of it? A factory worker has less personal interest in his work than a member of a socialist association. Besides, Mill maintains that humanity is capable of a far higher degree of public spirit than our age has become accustomed to regard as possible. And in any case, he thinks, one could hardly get a distribution that was more unequal and more unjust than the present. — The decision which of the two systems, that of communism or that of private property, is to be given the preference, must depend on which of them can best be reconciled with human freedom and development. Mill finds no necessity of abandoning the system of private property, if only it is freed from all the evils which are not inevitably bound up with it. If the laws did only as much to mitigate social inequalities and favor a greater distribution of fortune as they now do to heighten those inequalities and concentrate possession, it would be seen that the principle of private property does not stand in any necessary connection with the bodily and mental sufferings which the socialists regard as inseparable from it. Likewise he disagrees with the socialists in their polemic against free competition, in that he points out that one has only the choice between competition and monopoly, and that "protection against
[64] competition means the same as protection of sloth and idleness, as an exemption from the necessity of being as intelligent and active as other people."

Mill counts himself in the Autobiography among the adherents of socialism. Yet he is, as one sees, at odds with the socialists on essential points. What is socialist in his view rests on his demanding the intervention of state power in order to solve the social question. The conditions of the workers cannot be changed without a thoroughgoing alteration in their whole way of thinking, and this alteration in turn presupposes an improvement of their external conditions, which can give them desire for and taste for nobler enjoyments and higher culture. Only thereby can the dullness and thoughtlessness be eradicated that now make it impossible for the proletariat to raise itself, in that by its strong multiplication it constantly keeps itself down. The measures that are to be taken must thus work partly toward the development of intelligence, partly toward the abolition of poverty. The first is attained by a national education of children and by popular instruction, and as means to the second Mill proposes large colonization schemes and the parceling out of landed estates. When a generation of workers was thereby

placed under new and better conditions, there would have been provided favorable conditions for the development of a new generation with higher ends and greater energy. — We cannot here enter upon any appraisal of these proposals, but restrict ourselves to pointing out the remarkable fact that the same man who more strongly than anyone else has pleaded the cause of free individuality so urgently demands the intervention of state power in the social field. It might seem a contradiction to appeal to these opposite principles. But one sees easily that Mill posits an inner connection between them. The highest end of the power of society is to develop individual independence and personality, to secure the individual's activity at the points where everything can be left to its free play, and to nourish and tend individual freedom where it has not yet been able to unfold. It is of course far from the case that Mill has overcome all difficulties. But he has the great merit of having shown how wrongly one conceives the nature of freedom *[65]* when one holds that all intervention by state power in the field of social tasks ought to be over, and that everything could now be left to the "natural" course. There is still a long way to go before the truly natural development can set in. The state, by whose help man has been led out of the animal state of nature, cannot let go of him before it has led him to the human state of nature. Mill has finally also the merit of having pointed out the significance of the ideal and ethical elements for the social questions and thereby of having led beyond the narrow horizon that generally asserts itself in their treatment.

As the result of social development Mill imagines a condition where both capital and population are about stationary. Acquiring cannot be the final task; humanity must some day come so far that it sets the end above the means. One then no longer works to increase capital; all inventions aim rather at shortening the working time in order to win time for freer and nobler pursuits; the intellectual, aesthetic and moral life plays the principal role and claims the greatest part of energy. The population is stationary, because one sees that too strong an increase of it would hinder the higher and nobler development. Even if there were food and clothing enough for more still, there would nevertheless be overpopulation, when men lived so closely that it became impossible to enjoy solitude, and when free nature entirely was taken into the service of human utility. "A world from which solitude was banished would be a poor ideal. Solitude is an essential condition for depth in thought and in character; and solitude in conjunction with the beauty of nature is the cradle of thoughts and impulses that not only benefit the individual human being, but which society too can ill dispense with." — Even if the picture that Mill here sketches should be a Utopia, it has its significance and interest, not only as graphic expression of the goal of a humane endeavor, but also as a testimony *[66]*

to the noble, fresh and philanthropic mind of the great thinker whom we — despite all the criticism we have tried to bring to bear on his doctrine — cannot leave without admiration.

II. *Alexander Bain* (b. 1818) was born in Scotland and may be said to have continued the endeavors of the Scottish school in the domain of empirical psychology. His doctrine can be called "the Scottish psychology as it would look in the nineteenth century."[*)] But in place of the timidity of the older Scottish Philosophers, their appeal to the pronouncements of "common sense" and their inclination to halt at certain so-called facts of consciousness which they regarded as fundamental, there appears in their modern successor a confident and comprehensive application of the inductive method, a careful study of physiology and anatomy as the foundation of psychology, and a sharper criticism and analysis. Yet one still detects the aftereffect of the older school in the empirical-descriptive method, in a want of principled carrying-through of the concepts won by induction and analysis, and of synthetic development and presentation, by which a total view of mental life might be gained. It is this, together with the fact that in his whole standpoint he stands so close to Mill, that justifies placing him among the representatives of pure empiricism. In England itself he is reckoned to Mill's school. His chief works are "The senses and the intellect" and "The emotions and the will," in which, following the descriptive method of botany and zoology, he gives a natural history of the mind with a multiplicity of particular investigations and acute remarks that make these books highly instructive and interesting, though the survey is often hindered precisely
[67] by the multiplicity of the material. In a smaller work, "On the study of character," he has given a sketch of an ethology according to Mill's principles.

We have already had occasion to emphasize that Bain has corrected the sensualist conception of the mind as wholly passive. It is a decisive proof that the English philosophy of our time is not a mere renewal of the sensualism of the last century (perhaps rather sensationism). What was peculiar to the latter was that it reduced thought to sense-perception and conceived sense-perception as a purely passive process, a mere suffering and receiving. In opposition to this the opponents of sensualism generally conceived thought as something purely active and distinguished it sharply from passive sense-perception. This distinction rests, properly speaking, on the same presupposition as sensualism. There must be an inner relation between sense-perception and thought. When one acknowledges that we indeed have no innate concepts, but that the basic forms of our mental organization must be original, that we, as Leibnitz expressed it,

[*)] *Ribot*: La psychologie Anglaise contemporaine. Paris 1870. p. 222.

are innate to ourselves, then one must also acknowledge that the mental energy which manifests itself in the higher forms of knowledge must be present in the first manifestations of mental life, in the elementary sensations of sense, and that in the course of development it arises out of these and becomes conscious of itself. This is just what Bain teaches: "Sense-perception is already a function of the understanding; it is the purely outward manifestation of the ideal processes" (Senses and Intellect p. 339). And these ideal processes have their germ in the very starting point of mental life.

Even in the lowest manifestations of mental life there are, says Bain, elements of mind or thought (intelligence). The primitive fact that expresses the essence of the mind is the capacity to distinguish, to apprehend differences (discrimination). This is an original mental activity, which cannot be explained further, but on which all consciousness rests. It has as its presupposition the capacity to retain an impression even when its source is no longer present, so that it can be compared with another impression. Psy- *[68]*
chological analysis must therefore halt at it. Already Thomas Hobbes impressed upon us this basic fact, in that he taught that without change and motion neither sensation nor consciousness was possible.[*)] An action without change produces no impression on us. We do not notice the motion of the earth in space, but we do notice the motion of the ship on which we sail, and still more that of the carriage in which we ride. The sense of difference is thus the original mental element. All consciousness rests, properly speaking, on contrast and surprise and is the more intense, the greater the contrast and, as a consequence, the surprise. After a deep darkness the light is felt more strongly than otherwise.[**)] And it is with knowledge as with consciousness in general; the more differences are apprehended, the clearer and more determinate is knowledge. No characterization of an object is possible except through the determination of its differences from other objects. Even in the most elementary sensation of sense there is such an apprehension of the different, and to that extent a judgment, though in speaking of judging one commonly thinks of the more highly developed forms of the power of discrimination. Bain thus agrees with William Hamilton and the Scots[***)] in the doctrine that every act of consciousness contains a judgment. Sense-perception accordingly presupposes understanding (intellect). The old proposition: Nihil est in intellectu, qvod non erat in sensu — is utterly false. There is, as will soon be shown, a multitude of *[69]*

[*)] Per sensionem vulgo intelligimus aliqvam de rebus objectis per phantasmata judicationem; phantasmata scilicet comparando et distingvendo. . . . Adeo sentire semper idem et non sentire, ad idem recidunt. *Hobbes*: De corpore IV, 25, 5.

[**)] In this fact the interesting investigations of Weber and Fechner on the degrees of sensation (of consciousness) take their point of departure. Cf. "Philosophien i Tydskland" p. 253—255.

[***)] Lotze, too, teaches that sense-perception is a judgment. See op. cit. p. 295.

concepts that do not have their origin in sense-perception.

The first sensation is not a sense-perception of anything external, as the earlier sensualist school assumed. "Motion precedes sense-perception and is from the beginning independent of every impulse from without. Activity belongs more intimately and more inseparably to our nature than any of our sensations of sense do, and is in fact a co-operating factor in each of our sense-perceptions, in that it gives them the character of composite phenomena, whereas it is itself a simple and elementary property." But whence comes the original motion? A series of facts shows that the nerve centers can send out impulses to the muscles merely by virtue of their inner tension, which makes a discharge necessary. When the organism has received proper nourishment, the nervous system must have an outlet for its increased energy. We are thereby brought to see mental force in its connection with the other cosmic forces. Through nervous force it stands in connection with the chemical forces, with magnetism, electricity, heat and mechanical force, which all point back to the same origin and can all pass over into one another.

The first mental phenomenon is spontaneous motion, which we already encounter in the fetus in the mother's womb, but which also manifests itself in the newborn and in older individuals in the liveliness that is called forth by good and abundant nourishment, and in the spontaneous awakening from sleep.[*)] This spontaneous motion we become conscious of through muscular sensation, which is thus the first sensation, a sensation that differs from sense-perception proper in that it has its source not in an external but in an internal impulse. In muscular sensation, as in every sensation, we can distinguish two elements, a feeling element and a cognitive element. These two elements stand in an
[70] inverse relation to one another. The more I feel the pleasure or pain which the muscular motion calls forth, the less am I able to perform the discriminating and distinguishing on which knowledge rests.

The original motion is without aim and means, is an involuntary discharge of nervous force. But the direction of the motion is gradually determined by the impressions it calls forth; by them it is led into definite channels. One can observe this in newborn lambs. They involuntarily try to move their limbs, but this motion goes now sideways, now forward; only gradually do they learn that motion forward is the most natural. When the shepherd leads them to the mother ewe and lets them touch her, the impression of warmth which they thereby receive makes them seek to retain or to resume this position. When their mouth is brought to the mother's udder, and the involuntary

[*)] Bain here relies on the famous physiologist Joh. Müller.

sucking movements have begun, the enjoyment they feel in this will spur them on to continuation or repetition. Soon they recognize the mother at a distance and can perform the movements that are required to get to her. The original, spontaneous motion is thus the presupposition for the sensations of sense proper being able to teach the animal anything.

From the muscular sensations arise concepts such as resistance, inertia, weight and the mechanical properties of nature. They are measured by the degree to which we must exert ourselves. The difference between 4 and 6 pounds' weight we apprehend by the feeling of increased exertion which we must apply when we have to carry 6 pounds instead of 4. The concepts of duration and extension have their origin in muscular activity in connection with the sense of touch. Only by the aid of this sense do we gain definite points with which to measure motion, both as regards space and time. The combination of the muscular sensations with sight, hearing and the other senses gives us the more composite sense-perceptions. By means of these knowledge develops, but its germ is present from the first.

Already at the first step beyond, the first closer determination of the original spontaneous motion, the fundamental laws of mental life reveal themselves, the laws of association of ideas, by virtue of which mental phenomena enter into so close a connection that the one calls forth the other, — laws which hold for the whole domain of mental life from the lowest to the highest stages, and which are, in Stuart Mill's phrase, for the mental world what the law of gravitation is for the external world. These laws can be reduced to two: the law of contiguity (contact) and the law of similarity (likeness). Mental phenomena that occur simultaneously with or immediately after one another tend to call each other forth, when only one of them occurs later. And likewise mental phenomena that resemble one another tend to call each other forth. Older psychologists, in particular James Mill, tried to explain all mental phenomena by the law of contiguity. But this law presupposes the law of similarity, as William Hamilton has shown. For in order that a phenomenon may be able to call forth the idea of another phenomenon with which it has previously occurred together, the former must itself be recognized, known as the same that previously occurred together with the other. The law of similarity is thus a necessary condition for the law of contact to be able to operate. But where the similarity is complete, where it can be said that it is the same phenomenon that recurs, there one need not specially emphasize it. Conversely contact forms the tacit presupposition for the law of similarity to be able to operate; for in order that the similarity between two phenomena may be apprehended, they must first be brought *[71]*

together before consciousness. That there really are two different laws, although they may thus seem to pass over into one another, is seen, among other things, from the fact that decisive mental differences depend on which of the two laws is the predominant one. Association by contact in space or time (contiguity) plays a part especially in the accumulating of knowledge and in the execution of practical affairs. We then remember things in the same order in which they are wont to present themselves; habit and
[72] routine rule. Association by similarity, on the other hand, is predominant in the discoverer, the thinker and the poet, and conditions on the whole productivity and originality, whereas the law of contact especially conditions receptivity.

Let us consider first the law of contact or contiguity. That states of consciousness which have once occurred together later call each other forth cannot be explained further. It is a fundamental mental fact, which in turn points back to a fundamental peculiarity of nervous activity. Like the ideas, so too the corresponding nervous states must be connected. The idea of a sense-perception is merely a fainter sense-perception, resting on the same nervous current as the original sense-perception, only that this current too is fainter than in the original sense-perception. Repetition forms, as it were, channels for these currents, so that they can move more easily in certain directions than in others. A vivid idea of a certain motion can involuntarily call forth this motion; the idea of an abyss can arouse dizziness. Indeed, thought itself is properly only a recalled, an arrested motion. The brain is therefore not a storehouse in which thoughts and ideas are supposed to lie heaped up. Nor can there be innate ideas; all ideas rest on function and motion and do not exist without them, and so not before them either (cf. Schelling; see above p. 12 f.).

Association by contact can take place either between states of consciousness of the same kind (e.g. a sound and another sound, a motion and another motion) or of different kinds (e.g. color with resistance, motion with distance, etc.). Of the first kind the association between different single motions is especially important. Almost every significant manifestation of life in animals and men rests on very composite motions, which come into being only gradually. One of the most important examples of association between states of consciousness of different kind is the process by which the idea
[73] of an external world arises. In general one regards this idea as natural and instinctive and has no inkling that it has a very involved and composite origin. Many different motions and sensations must, by frequent repetition, enter into a firm connection in order for that idea to be able to arise. It is the sensations of sight and touch in union with the muscular sensations that produce the ideas of solidity and extension, which

are the essential elements in the idea of external material things. In particular Bain here lays stress on the sensation of our own motions. When we move our limbs and as a consequence receive certain sensations of sense, we derive these from external things. If our sense-perception were perfectly passive, our conception of the universe would be like a dream, in which one image replaces another. Our sense-perception is, however, as shown in what precedes, rather active than passive. And we believe in an external reality because we know that when we perform a certain motion, we shall thereafter get a certain sensation of sense. "Our external world is the total sum of all opportunities for developing energy." The assumption of an external world is thus a generalization or abstraction founded on particular experiences, by which we sum up the past and predict the future; but by an illusion our consciousness then posits this abstraction as an original and independent source and cause of those particular experiences, much in the same way as Plato posits the ideas of the Good and the Beautiful as independent realities outside the particular good and beautiful things from which they are abstracted. But such an absolutely independent external world we have no ground to assume. "The world can be known only in its relation to the mind. Knowledge is a mental state; the concept of a material thing is a mental thing. We are unable to investigate the existence of an independent material world; an attempt at it would be self-contradictory. We can speak only of the world which presents itself to our mind. By an illusion which language carries with it, we believe ourselves able to contemplate a world that does not enter into *[74]* our own mental existence. But this very contemplation is itself a mental activity."

There is thus in Bain the same approximation to Berkeley as in James and Stuart Mill. Yet one can draw from him, no more than from these, the consequence that everything must dissolve into semblance and delusion; for he holds fast to a pervasive duality in the view of the world, resting on the opposition between subject and object, idea and reality. The basic activity of our knowledge is, according to Bain, discriminating and comparing. It therefore always presupposes plurality and change. We know only relations, difference and similarity. A thing can be apprehended only when there is a background, a foil, in relation to which it can be judged and characterized. With the discovery of new foils, of new oppositions and differences, knowledge advances. In the last instance all oppositions can be reduced to the opposition between consciousness and existence (actuality), subject and object. A removal of this opposition is impossible; an absolute subject and an absolute object are equally unthinkable. Berkeley's error consisted in letting the actual be absorbed in the ideal, the objective in the subjective. This opposition one must hold fast, even if one rejects the assumption of a world abso-

lutely separate from the mind. Actuality and ideality are akin in their essence; idea and real motion rest on the same nervous function. A whole series of transitions can also be pointed out from the objective pole to the subjective; but the opposition itself between the two poles cannot be removed. "Extension is the most pronounced objective fact, pleasure and pain the most pronounced subjective states. Between the consciousness of extension and the consciousness of pleasure there is the greatest difference which human experience can posit in the whole existing world. It is the extreme object and the extreme subject; and the carried-through analysis shows us that the extreme object rests on the sensation of applied muscular energy."

[75] Association of ideas on the ground of similarity plays a part especially in the higher intellectual activity, whereby order and coherence are brought into the material accumulated by the working of contiguity, and whereby this finds its explanation and is conceived in new ways. The identifying (seeking similarity and unity) force operates in all thought, but can be present in very different degrees. Its strength shows itself in the magnitude and multitude of the differences through whose cover the agreement must be sought. On it rest classification, abstraction and definition, whereby one identifies several objects by emphasizing a common feature or a common group of properties as a special object of consideration. The more the law of similarity operates, the more perfect become abstraction and classification. What an advance there is, e.g., between Aristotle's division of animals into water animals, land animals and air animals and Cuvier's system, which is grounded on the internal structure of animals and according to this divides them into vertebrates, articulates, mollusks and zoophytes. In place of the external and accidental similarities the internal, essential agreements come. By classification, abstraction and definition we form general concepts. General judgments we form by way of induction. Here we do not, as in abstraction, turn our gaze to a single property or a single group of properties, but we emphasize a certain conjunction, a certain connection of two or more properties and facts. When we state the constant coexistence of two facts, we express a law of nature.

The laws of contiguity and similarity are the fundamental laws of association of ideas. But there are given not only simple but also composite associations of ideas. When I, e.g., contemplate a mountain, this may lead my thought along many different paths. According to the law of contiguity I may be led to think of the neighboring mountains, of valleys and villages in the vicinity, of the minerals of which the mountain consists, of historical memories that attach to it. According to the law of similarity
[76] I may come to think of similar mountains, that I have seen or read about, of paintings

and poetic works, etc. Which of all these directions thought chooses depends on which of them is strengthened by connection and combination with other ideas. When I, e.g., am a historian by profession, the historical memories operate most strongly; if I am instead a geologist, the physical character of the mountain will captivate me most, etc. Associations that singly are too weak can gain the power when they operate together with several others. Most often feeling and will play an important part here, either hindering or furthering. When the composite associations are of a purely accidental character, they serve precisely to lead thought away from the essential. From this all self-contradiction and inconsistency are to be explained. Only when the force of similarity is sufficiently developed will it free the mind from contradictions by placing the conflicting side by side and drawing attention to the discrepancies. When one, e.g., has two opinions that stand in contradiction with one another, and between which one must therefore choose, it is the law of similarity that grounds the necessity of choice. But this working is hindered by the influence of inclinations and moods which have attached themselves to certain ideas. Hence it comes that absolute consistency is so seldom found in human views and characters.

The laws that have so far been pointed out for the associations of ideas concern the reawakening of earlier ideas. But the mind is not bound to what it has previously received; it can form new connections. Then we have what Bain calls constructive association. The creating of imagination rests, as Hobbes already indicated, upon this; we have the idea of gold and the idea of a mountain, and the fairy-tale poet now forms from them the idea of a mountain of gold. Not only art and poetry rest on constructive association, but also all conception of nature presupposes it. For the real nature we understand only when we unite in a total coherence what analysis and abstraction have separated. The same holds when we wish to enter into the moods and passions of *[77]* others; we understand them only when we construct their mental state by combining the particular elements (fear, anger, longing, etc.). In all such constructions, even the most original and creative, it is no wholly new principle that operates; what is needed is only a vigorous working and co-working of the laws of contiguity and similarity. —

Bain follows the old threefold division of mental phenomena into knowledge, feeling and will, not in the sense of special faculties or powers, but as groups of related phenomena, as natural orders, each of which in turn comprises several subdivisions. The life of knowledge is comparatively the easiest to understand; analysis can more readily be carried through in the domain of clear consciousness, where the particular elements are as a rule known. More difficult becomes the conception of the life of feel-

ing and of will, because the obscure natural ground and the unconscious life play so great a part here. Here Bain's descriptive and analytical method also does not suffice; it brings forward only the phenomena that move on the surface, but does not demonstrate the deeper coherence. Spencer has, in his criticism of Bain's work "Emotions and Will," emphasized that not only must the analysis be carried through to more primitive forms than Bain has done, but that there must be laid as the basis of the whole study of the life of feeling a comparative investigation of its appearance in the different species of animals and races of men and in the same individual at different ages, so that one may come to know the conditions and course of development of every feeling. Yet Spencer himself has treated this difficult psychological problem only in passing.

As the basis of his classification of the feelings Bain lays three criteria, namely, besides the character of the states of consciousness themselves, their physiological effects and their aesthetic or moral forms of expression. In this way he comes to set up the following classes. 1) When the impressions agree, harmonize, so that the feeling on the
[78] whole can have its free course, pleasure arises; in the opposite case a feeling of constraint and pain. 2) Perhaps the most elementary feeling is wonder, the feeling of surprise; it is, as we have already heard, tied to the very fundamental law of consciousness, according to which relation, opposition and change are necessary for all apprehension. 3) Fear and all that belongs to it, superstition, anxiety, etc., together with its opposite, courage in its different kinds. 4) The feeling of tenderness and benevolence, which is of a predominantly passive character, and sets the glands rather than the muscles in motion; the feeling of tenderness (the tender affection) must not be confounded with sympathy, which is a very composite feeling that can develop out of the feeling of tenderness, but does not necessarily presuppose it. Sympathy presupposes that one has entirely entered into another's state and regards it as one's own; but the feeling of tenderness may well restrict itself to one's own person, and we then get 5) self-love and self-satisfaction, which have their ground in the passive enjoyment and delight in one's own self. 6) The feeling of our power and of the superior activity we exert, in whatever domain it may be (politics, wealth, artistic and scientific proficiency, etc.). This feeling can fuse with self-love, but the two are nevertheless different in their essence. There are men, especially hard and stern natures, in whom the consciousness of power plays a great part, without their being able to be called egoists or self-admirers. 7) The feeling of anger, where it is not a pleasure that calls forth another pleasure, but a pain that brings about another pain. 8) The feeling of pleasure that is brought about by eagerly pursuing an aim (in earnest or in play), by exertions in which one is wholly absorbed in

one object (emotion of pursuit; plot-interest). 9) The intellectual enjoyment, the feeling of pleasure that the activity of thought calls forth, in particular through the discovery of similarity, agreement and consistency; on this rest the joy and interest in scientific discoveries, poetic images and industrial ingenuity. On the other hand inconsistency and disharmony call forth a painful sensation especially in thinking natures.*) These *[79]* feelings become of importance also in the moral respect by leading to truth and justice. — To these elementary feelings are finally added the most composite of all, the aesthetic and moral feelings.

Already older English investigators, Alison and after him James Mill, applied the laws of association of ideas to explain the feeling for the beautiful and the sublime. Coleridge, following Kant, drew attention to the difficulty of distinguishing between the beautiful and the agreeable, when one confined oneself to the mere associations of ideas. The English aesthetician John Ruskin lets the associations of ideas serve as means of calling forth higher ideas; beautiful is, according to him, what recalls divine ideas and attributes (Infinity, Unity, Peace, Harmony, Purity, etc.) which find their expression in the world.**) Still more than Ruskin Bain here points back to Kant. In order that an impression on the whole be of aesthetic nature, he says, it must not be purely sensuous, since it then takes on an interested and egoistic character, which makes it purely individual and renders a pure and common enjoyment impossible. Therefore sight and hearing are the most aesthetic senses; with these it is easiest possible to disregard the egoistic drive. The beautiful proper rests on harmony. The sublime rests on sympathy. *[80]* Our thought goes involuntarily in the same direction as the impressions: the great in nature awakens the thought of the great in us, especially in the highest forms of the human mind. The true sublime is human power: the sublime that we find in nature we apprehend only by clothing it in human forms and interpreting it according to human ideals.

The moral feelings are, according to Bain, still more composite than the aesthetic. He polemicizes against the one-sided attempts at explanation which derive all actions from a single drive or side of man's essence. He polemicizes likewise against the as-

*)"There is a kind of pain which is characteristic of intellectual natures, and which is very little felt by others; it is the pain of inconsistent ideas, opinions and principles. Strong feeling united with a less developed understanding easily carries one past the offense which contradiction gives; but on a mind endowed in the opposite way inconsistency acts like a grating sound and becomes a spur to intellectual exertion, which heightens the natural inclination to let the ruling faculty of the mind operate. To this pain we must ascribe an important function, namely the incitement to strive after truth and not merely after manifold intellectual images and ideas. . . . Herein lies a great motive to carry through scientific investigation and to root out popular errors." *Bain*: On the study of character. p. 272 f.

**)*Milsand*: L'esthétique Anglaise. Etude sur Mr. John Ruskin. Paris 1864. p. 149. Cf. *Stuart Mill's* Note 48 to James Mill's "Analysis" II.

sumption of a universal moral law that should be able to serve as rule and standard in all particular cases. Where do we find such a law? We can set our watches by the Observatory at Greenwich; but where do we get a common signal to regulate our actions? There is as little a general moral law as there is a general reason; each individual has his reason and passes his judgments according to his individual standard. There is as little anything good in itself as there is anything beautiful or true in itself; these ideas do not exist outside the individual consciousnesses: even if individuals agree in their judgments, this agreement can as little be derived from a truth existing in itself as one can ascribe to a choir a general voice, different from the voices of the individual singers. — On the contrary, we need only cast our eyes around us and read history to find the powers that really rule in the ethical world. It is not an invisible moral ideal, but real authorities, that operate. We find no original feeling of duty and justice; the original springs of action are fear of punishment, respect for authority, the feeling of tenderness and sympathy, self-love, etc. Of these egoism will always gain the upper hand, unless the egoistic drive itself is brought into the service of duty, which happens through the
[81] relation to a punishing authority. Obligation is the fundamental moral phenomenon. But obligation is in question only where transgression of a law entails punishment. Responsibility is thus punishability. And punishment in turn presupposes an external power, a real authority, from whom the command proceeds, and who can chastise its transgression. But by the power of association of ideas the original motive is gradually lost sight of; the virtues that at first were practiced only under constraint gradually become ends in themselves, just as money becomes an end in itself, whereas originally it was desired only as a means to the satisfaction of certain needs. The associations of ideas have a tendency to produce new centers of gravity, where often more powerful feelings can be concentrated than the original motives were able to call forth. Thus conscience emancipates itself gradually from the fear of punishment, especially by the help of the working of knowledge and sympathy. The submission and feeling of obligation which the individual has learned in the relation to the external power are now transferred to the relation to the inner, ideal power. Thereby man becomes mentally free, raises himself above the slavish way of thinking.

As a contribution to the ethical history of man's development this description is excellent. Far from, as Bain thinks, disproving the self-validity of the ethical law, it confirms precisely this. For it demonstrates that there is a law of evolution, by virtue of which man raises himself from lower to higher and nobler forms of mind. This law is a law of nature, but a law of nature which the self-conscious mind can make its rule of life,

according to which it can form its ideal; here is then the transition from law of nature (in a narrower sense) to moral law. It is by virtue of this law that man can turn with criticism and protest against authorities, over against which he perhaps outwardly must succumb; it is by virtue of this law that the authorities struggle among themselves, and the one supplants the other. Under such conflicts it shows itself clearly that the real power is the inner, the ideal power, which uses those external forces as means for its own unfolding. According to Bain's doctrine one would have to conclude that morality ceases when the *[82]* authorities lose their power. This consequence is also drawn by Kirchmann, a shrewd German author,[*)] who proceeds from similar presuppositions to Bain. The ethical is then itself only a means, which falls away when the end is reached. But if the ethical has its ground in man's essence as disposed to development, then there will never come the time when it could be replaced by other ideas, — not even in "the stationary state."

According to Bain a definite distinction must be drawn between duty and merit. What one is obliged to do is only what one would be blamed or punished for omitting; what one does beyond this is merit. This is not merely consistent, but at the same time in a high degree characteristic of the empirical morality, which grounds the ethical on factual conditions (authority and drive) and therefore cannot embrace the ideal striving which goes beyond these, — and this striving is nevertheless the highest form of the ethical. On this point empiricism is in agreement with Catholicism, which has a rule for ordinary Christians and another for saints. Mill admires in this respect too "the wise and clear-sighted men who created the Catholic Church." Protestant ethics has lodged an energetic objection against this opposition between duty and merit. We are obliged to acquire for ourselves all the merit we can; — even when we do so, we have still done only our duty. There is in these concepts a dialectic which demonstrates the insufficiency of the empirical morality. This is one of the points where French positivism departs from English empiricism.[**)] The energetic Auguste Comte, glowing with enthusiasm, who otherwise admires medieval Catholicism, agrees on this point with Protestantism and demands of everyone an absolute devotion in the service of humanity, a complete *[83]* surrender of egoism. The empirical school, which with Bentham and Mill builds on "the well-understood interest," cannot acknowledge such an obligation, indeed probably even regards self-sacrifice and disinterested action with a suspicious eye.[**)]

[*)] I. H. v. *Kirchmann*: Die Grundbegriffe des Rechs und der Moral. Berlin 1869.

[**)] Cf. *Littré's* polemic against utilitarianism: La science au point de vue philosophique. 2éd. p. 340 f.

[**)] "Disinterestedness is, strictly speaking, a kind of unreason or insanity with regard to the individual's own self, a contradiction of the innermost nature of the feeling being, which moves toward pleasure and away from pain. When we abandon this fundamental principle of our constitution, we stand constantly on the border of absurdity and lawlessness. For when a man has ceased to care for his own welfare or to

Bain's ethical principles demonstrate the deficiency of his psychological investigations. He has not carried through the analysis of the feelings in such a way that it led to discovering the fundamental drive in human nature, but remains at a plurality of primitive feelings. A scientific ethics must have its real foundation in that fundamental drive. The vacillation of the concepts of utilitarianism has precisely its ground in an obscurity with regard to the original psychological starting point. Next, Bain has also not emphasized the central significance that knowledge has for the purification of the ethical consciousness; it is by the labor of thought that there dawns upon consciousness an idea of an ideal which points beyond the finite, the factual and the egoistic. —

The original activity which, according to Bain, is the starting point of mental life receded into the background in the investigation of the life of feeling, but it must by the nature of the case again become of importance in the investigation of the nature of the will. The earlier association psychology had properly speaking wholly to deny the existence of the will. According to Bain the development of the will has two presup-
[84] positions: the spontaneous motion, which precedes all sensation, and the bond which makes a certain motion follow upon a certain sensation. The birth-hour of the will is the moment when a sensation for the first time determines an action. The involuntary motion becomes, by association with the sensation of pleasure or displeasure, a voluntary action. In this way the individual gains the capacity for more composite motions and is trained to mastery over his limbs. Gradually the transition from sensation to action no longer takes place instantaneously. Between the two there interposes itself the idea first of the action's direct, then also of its indirect consequences. A struggle arises between the different ideas and the impulses they give; against the present or near pleasure and pain there is set the idea of possibly occurring stronger sensations. This debate, during which the action is suspended, is deliberation. It was originally called forth by the experience that hasty acting brought pain with it. By it the domain of the will is extended, and a higher development, an ennobling of the motives, becomes possible. The voluntary actions are distinguished from reflex actions in that consciousness steps in between the impression and the action. Thereby a mastery becomes possible not merely over our external actions, but also over our thoughts and feelings, which indeed are themselves properly motions. But this mastery can be exercised only indirectly, by a roundabout way; we check the feeling by holding back its outward signs or by turning our attention toward certain ideas that can call forth other feelings.

---

act in the direction of his own pleasure, why should he then care for the welfare of anyone else? He has denied felicity as an end and must, if he is consistent, extend the same standard to all around him." *Bain*: On the study of character. p. 292.

The older Scottish school (Reid and his disciples, indeed even W. Hamilton) assumed the will, in the sense of free mastery over the limbs, to be an original faculty. Bain declares this an illusion. The will has its germ in the original activity, but it must go through a long process in order to become what is commonly called free will. Of freedom there can here be no question in the sense that a power different from the particular mental phenomena, an inner self, should intervene; the series of associations and mo- *[85]*
tives cannot be interrupted. Bain treats this question like Stuart Mill and polemicizes like him both against the doctrine of freedom and against the doctrine of necessity. In particular he rejects in a striking way the appeal to the testimony of consciousness, to the feeling of freedom. Immediate consciousness, he says, can teach us no more about the psychological laws than immediate contemplation of the heavens can teach us about the astronomical laws. Consciousness acquaints us with the particular mental phenomena, but does not teach us their nature and coherence, which can be found only by investigation and analysis. In any case we have no infallible authority in it. Infallibility and knowledge exclude one another. The will is, as has been shown, a very composite phenomenon; in the combination of the many details that belong to apprehending it, too many errors can therefore be committed for us to be able to build upon an immediate assurance. —

Closely connected with Bain's theory of the will is his conception of the concept of belief or assumption (cf. already above p. 73). What is required for us to believe anything? James Mill, with whom Herbert Spencer here sides, explained belief as a firm and indissoluble association between two ideas. But according to Bain, with whom Stuart Mill has declared himself in agreement, belief cannot be explained by being regarded as a purely intellectual phenomenon. It is the connection with a practical end, with an acting, that distinguishes belief from a mere fancy. The most primitive form of belief is the expectation that after a certain action a certain effect will follow. The original activity has an irresistible urge to discharge itself, and the discharge takes place naturally in the direction in which it has previously shown itself to bring satisfaction. The hungry beast of prey keeps to the path on which it has before come upon its prey. The sight of the brook lures the thirsty, because he expects there satisfaction of his craving. The higher forms of belief too have their criterion and standard in the acting to which they lead; *[86]*
those who do not hope, fear and act in accordance with their religious belief imagine only that they believe, but do not in reality believe.

From the original activity there therefore springs a strong tendency to believe. Here lies the germ of all generalizations, all general propositions: the first experiences are

raised by the primitive drive to general laws. Thus arise the intuitive or a priori assumptions; and thus in particular the idea of the Infinite and the Ideal has arisen. But advancing experience corrects step by step the original intuitions. The beginning is the spontaneous assumption, the intuitive view; but soon doubt rises at the conflicting cases which experience points out. Experience is therefore the only certain source of knowledge, the real authority by which we must measure all our assumptions. Our views thus do not grow with a quiet and even growth, but form themselves under a constant struggle between the spontaneous, generalizing and idealizing intuition (Bacon's antecipatio naturæ) and the weighing and testing experience. We have a strong tendency first to believe and afterwards to prove, and it will probably last long before the disappointments which this procedure brings with it come to an end.*)

This last development characterizes Bain's whole standpoint. The original activity, which is his psychological discovery, and by whose acknowledgment he decisively leaves the older sensualist school, he uses only as a starting point, from which he in
[87] turn strives to free himself, in that he lays the chief weight on experiences and associations of ideas. Besides that original activity, which still belongs to the pre-conscious life, he assumes yet another original mental element, which underlies all manifestations of consciousness, namely the original sense of difference; without it there can be no question of experience or association of ideas. But we thus halt at an opposition between the active and the passive mental phenomena, which nevertheless in every real mental function are to go together, without any attempt being made to show how the relation between them stands. Sense-perception cannot take place purely passively, when it has the spontaneous activity and the elementary function of the understanding as its presupposition. And just as little can association of ideas be a purely passive and mechanical act. In particular the law of similarity decisively points back to the original energy with which the mind strives after unity in its view and its thought. It shows itself at all points that receptiveness presupposes activity, devotion freedom, just as on the other hand what is received heightens activity, devotion purifies and ennobles freedom. We thus come also here to the result that the empirical leads beyond itself, both by the original ideal presuppositions on which it rests, and by the ideal end in whose service it labors. The ideas of the Infinite and the Absolute have, precisely according to Bain's

*)"Man has certainly an unbounded longing, and the metaphysical doctrine of the Infinite corresponds in a way to it. But in real life we find very few of our wishes fully satisfied, not even those which are most honorable to the human mind, such as the drive for knowledge, longing for self-development, the drive to do good. How can we then assure ourselves which longing carries its own satisfaction with it? Especially since the intuitive aspirations go in very different directions in different men, and cannot all be equally true." *Bain*: The emotions and the will. London 1859. p. 587.

psychology, their source in the innermost essence of man. Then it can only be apparent that the *human* experience disproves them. Experience can refute the conditioned and historical forms in which the ideas appear; but this refutation can only become the introduction to the labor toward a new and more perfect expression, corresponding to the new presuppositions. Bain's striking remark that infallibility and knowledge exclude one another holds nowhere more than in the knowledge of the Ideal and the Infinite; — and yet he himself seems to proceed from the assumption that we cannot attain such knowledge, because we can attain nothing infallible!

Chapter Three. *[88]*

The Critical School in England.

Empiricism leads, as has been shown, beyond itself, both in a negative and in a positive way. Negatively — for by setting experience and association of ideas in opposition to inner necessity it cuts itself off from the possibility of any grounding, of getting beyond the contingent. Positively — for its own investigations lead to the recognition of the original activity of the human being and of human thought as a primitive and irreducible element in all knowledge. There is a close connection between the two results, the positive and the negative. For the ultimate grounding that human knowledge is able to attain can be achieved only by going back to the ultimate presupposition of all knowledge, which cannot be sought elsewhere than in the very nature of the knowing being itself and its original organization. And here we stand precisely at Kant's fundamental thought. That we cannot, as Mill supposed, conceive an absolute disorder, an unconditioned contingency, but that even imagination refuses its service to this, comes from the fact that that original element of thought brings about a connection in all sense-perception and knowledge. And on the other hand it now becomes clear how we can pass judgments that are valid for all possible experience and in all cases (like the logical and mathematical propositions); it is by virtue of the same element, lying at the ground of all experience and therefore relatively independent of experience. We are determined only by experience in that we ourselves determine experience.

By Kant's critical philosophy, whose great significance rests on having brought out this way of regarding knowledge, those men are strongly influenced who in England *[89]* stand as the opponents of empiricism. It is on the other hand interesting to see that the

general tendency of English philosophy toward induction and the real also clearly prevails among them. They too recognize that experience and induction are our essential paths of knowledge; they turn with sharp polemic against the German speculative systems and assert the relative and the empirical as the proper domain of our knowledge. But they assert that experience cannot be its own foundation, but presupposes certain principles on which its own possibility and validity rest.[*)] A decisive opposition exists
[90] between the investigators whom we are to occupy ourselves with in this chapter, and their opponents. The representatives of the empirical and realistic school have their view of life in their philosophy. For Whewell and Hamilton, on the other hand, philosophy is only an outwork; the real sanctuary, the view of life itself, rests in both these men on positive religion. This must naturally also have consequences in a philosophical respect, especially with regard to consistency and carrying through of the principles. The philosophical problems are not held fast and debated in their purity, when another interest plays in on the part of both assailants and defenders. Although the struggle has only exceptionally extended into the religious domain, the feeling must nevertheless often have arisen that this was what it was really about. On the other hand this circumstance has given the struggle a heightened interest, in that the questions of principle, which the English otherwise prefer to hide under the mass of details, have thereby come out more clearly. —

I. *William Whewell* (b. 1795, d. 1866). — That investigators other than those who belong to the empirical school can also ascribe to experience a significance of principle and have earned merit in respect of it, of this we have an example in Whewell, who

[*)] However, the ideas of German speculation too have gained entrance in England. Not only are there Hegelians in Oxford, but already *Coleridge* independently developed several Schellingian ideas, particularly in the aesthetic domain (the concept of imagination). And here a more recent author must be especially mentioned, the well-known historian *Thomas Carlyle* (b. 1795), who in his "Sartor resartus" (written 1831, published some years later, first in North America, where Carlyle is much read) has presented, in humorous form, a humane view of life that has sprung from serious and profound thought. His view of the world is an idealism, for which "all objects are only windows, through which the philosophic eye looks into Infinity itself." "The whole outer universe and all that it includes is only a clothing; and the essence of all science lies in the philosophy of clothes." Everything is symbols; but the highest symbol is in the heroic personalities, the models of humanity. — Stuart Mill states in his Autobiography how much he owes to Carlyle, who often by his intuitive path developed ideas to which Mill came only a long time afterward through induction. Thus one will find, among other things, in the cited work of Carlyle (Book III. chap. IV.) Mill's sociological view in nuce. Nor does Carlyle conceive philosophy merely as speculation; besides the definition cited above he also gives another, which shows the practical significance of theory: "What is philosophy but a constant struggle against habit, a ceaselessly renewed effort to go beyond (to transcend) the sphere of blind habit and thereby become transcendental?" This definition is apt against empiricism, according to which all knowledge rests on habit, so that the attempt to get beyond habit is self-contradictory, although Mill has believed that in empiricism he has the only usable means of combating handed-down habits and prejudices. — Yet for Carlyle it is not thought but imagination that is the highest; "The understanding is the window, but imagination is the eye that sees through it." The philosophical ideas are for him a serving foundation for mysticism and morality.

not only himself began as a specialist in natural science (mineralogist), but whose "History of the inductive sciences," according to Stuart Mill's own declaration, was for him an indispensable foundation in the working out of his Logic, which without this work could not have been carried through. The study of the natural sciences led Whewell to investigate their method and the principles and conditions of their development. These investigations led him more and more to a conception of the nature of knowledge and of experience which on the whole agrees with the Kantian, although he too, not always to the advantage of definiteness and consistency, is influenced by the Scottish school. We find also in him this school's inclination to appeal to the common consciousness *[91]* and to content itself with the traditional ideas instead of entering upon more rigorous philosophical analyses.

Having completed "the History of the Inductive Sciences" (1837) Whewell published his second chief work "Philosophy of the inductive sciences, founded upon their history" (1840, revised 1847), in which by means of the historical development of the sciences he seeks to trace the relation between the elements of knowledge. To this work we shall in what follows chiefly keep. —

Not only the natural sciences, but also the sciences of mind (psychology and ethics) are inductive sciences. But there is an element in induction that has often been overlooked. The great discoveries and advances in the history of science take place not only through the pointing out of new facts; an essential condition is the ideas and forms by whose help these facts are conceived and determined; indeed, the very pointing out of facts often becomes possible only because the investigator is led by the right way of regarding things. The single facts are not merely to be brought together, but to the very mental activity by which they are combined a new element is added; a general proposition is formed which did not exist in any of the observed facts in and for themselves. There must be found an intermediate determination in which the known and the unknown facts can meet. Thus Kepler conceived the orbits of the planets as ellipses, and thereby it became possible for him to set up his laws.[*)] In the same way New-

[*)]"Only those," says Whewell (Gesch. der induct. Wissensch. übers. von Littrow I. p. 426) on the occasion of Kepler, "attain the possession of new truths who can make a lively leap from a point within their knowledge to others, which are often far removed from it, and bring about a connection between them, — not those who cautiously stand still at every place and wait until they are driven from without to go further." Cf. *Reuschle*: Kepler und die Astronomie. Frankfurt 1871. p. 141: "To the question how Kepler found these extraordinary propositions (the three famous laws), the short answer is probably that he calculated them out of Tycho Brahe's observations, since these were so good that they were satisfied only by the elliptical theory, and he had mathematical power and endurance enough not to rest until he *[92]* had in all respects done justice to those observations. But we must now descend deeper into the workshop of his genius and follow the course of his research from his fundamental thought, in order to see how the history of his objective, physical work is most intimately bound up with the history of his subjective,

[92] ton conceived gravity as attraction and this as a universal cosmic force. Only on the presupposition of the introduction of such an idea does a discovery become possible. But in general one conceives induction rather as a means of proof than as a method of discovery.

Concept and fact stand in a reciprocal relation to one another. The concept can never be independent of the fact, but on the other hand the fact must constantly be drawn toward the concept. Knowledge presupposes a combination of thought and object. Without thought there would be no connection between the objects, without an object there would be no reality. Every single act of knowledge includes both elements. The difference between them can only be relative. What from one point of view is theory is from another point of view fact. What in relation to a preceding investigation is theory is in relation to a following fact. That the planets move in ellipses was with Kepler a theory, but becomes with Newton a fact. A true theory is a fact; a fact is a theory with which one is familiar. Both are only inferences that we draw from the phenomena; what we call theory is a conscious inference; what we call fact is an unconscious inference.

Let us in this respect consider sense-perception itself. A coherent image of a sensible
[93] object is formed only when the individual sensations are combined and comprehended into unity. An unconscious inference lies at the ground of all our sense-perceptions. Concepts such as space, distance, solidity, etc. develop only through the sensation of our muscular movements, and we then transfer them involuntarily to the objects. We see a movement take place and infer force as its ground. We see different plants or animals, but only because we apply to them our ideas of likeness and unlikeness. Likeness or unlikeness we see as little as we see force or space; or rather, we see them only in so far as we put them into the phenomena. From this it can be seen how senseless it is to designate the ideas or concepts as mere transformed sensations of sense. Even the most elementary sensation cannot come about without a contribution from the sentient subject. Our conception of nature is from first to last an interpretation of nature, a translation of its content into our own language.

The subject's contribution to the knowledge or interpretation of phenomena consists in a series of ideas or fundamental concepts, which bring connection and unity into the content of experience. Not as though these ideas were to lie ready-made in the

metaphysical system ..... At the ground of all Kepler's mathematical investigations and metaphysical researches lies the idea, the conception of which alone would be enough to found his greatness, that the solar system, whose rough outer outline Copernicus had given, is a real system only when law and order prevail in it, so that the laws that govern the motions have their cause in definite inner forces which are essential to the nature of the system and its bodies."

mind from the start. They must not be separated from the conceiving activity itself, but are precisely this activity's forms and laws; only by reflection on that activity do we come to know these forms and laws, and only through experience is that activity set in motion. Consciousness would thus have no ideas and fundamental concepts, if it did not stand in interaction with the world of space, time and matter; but then we also know no consciousness at all that does not stand in such a reciprocal relation. We cannot imagine any stage of human existence where that activity and its fundamental laws do not already come into force and are developed through experience. The forms and ideas operate long before we become conscious of ourselves, and are developed and modified in many ways by the influence of events and phenomena. How far this modification extends we cannot judge; but it is certainly of essential significance for the process that *[94]* goes on in our consciousness.

The fundamental concepts are acquired in the course of experience, but they are not learned from experience in the same sense as specific facts are learned. The single facts are for us more or less contingent; for a time they are unknown, at another time known; some know them, others not; they are known with greater or lesser certainty. But the fundamental concepts are the laws according to which all conception, all experience proceeds. It is this their universal and necessary validity on which their difference from the concepts of experience rests. We can learn universal truths, e.g. the law of gravity, from experience. But if these truths really have universal validity, then this is due to the ideas which the understanding applies to the given.

The two elements that interpenetrate in our knowledge thus condition a fundamental opposition, which reveals itself under a series of forms: idea and fact, concept and object, theory and fact, inference and observation, but which has its sharpest expression in the opposition between necessary (a priori) and experimental truth. The former springs from thought, the latter from observation. We cannot conceive the fundamental concepts in themselves; they find their expression in certain fundamental propositions and determinations of concepts, to which thought comes when it reflects on its own working. Each single science has its original fundamental propositions or axioms, which spring from the fundamental concept, the idea, on which it rests. Thus the axioms of mathematics spring from the ideas of space and time, which lie at the ground of all conception of the given, the axioms of mechanics spring from the idea of cause, which likewise is an original law for the working of thought. From the general axiom that everything has its cause follow the mechanical axioms that causes are measured by their effects, and that reaction is equal to action. The laws of motion derive their *[95]*

form from the idea of cause, their matter from experience. The axioms are naturally abstract and must be interpreted by study of actual nature; but they constitute the firm kernel around which the knowledge of the latter can develop. That the ideas cited are necessary means that it is impossible for us to think the opposite of them, and that every objection to their validity precisely presupposes it. We may err in the explanation of the particular; but that there must be an explanation, a cause, is a presupposition we cannot do other than proceed from. We cannot, e.g., conceive a stone floating in the air instead of falling to the ground, without having to presuppose a cause of this deviation from the general law.

Just as the ideas of space and time lie at the ground of mathematics and the idea of cause of mechanics, so is the idea of purposiveness or of purpose necessary for conceiving the organic phenomena. Nor can this idea be derived from experience; it develops of necessity as the only form under which we can conceive the phenomena of life. Harvey's and Cuvier's discoveries became possible only through it. It has indeed been held that as scientific knowledge advances, the domain of final causes is restricted and the mechanically operating causes step in. But this is an illusion. The idea of purpose must now be conceived in another way than before, but cannot be given up. We do not see purposiveness in particular single phenomena, but in the whole connection. We do not suppose that a cloud is sent, so that it may rain on our field, but we find the idea of purpose expressed in the connection between the laws of heat, air and liquids and the development of vegetable life. The idea of purpose thereby acquires precisely a more grand character: instead of a few threads that connect separate objects, we obtain a total connection embracing the whole of reality.

[96] Also in the domain of ethics[*)] we have an originally operating idea, which comes to light in the axiom that we ought to do what is right. Even if there is disagreement about *what* is right, there is nevertheless no dispute *that* the right is to be done. This germ of the moral life is developed further through experience in a manner similar to that in which in the theoretical domain the fundamental concept is developed through the observations. Men's drives bring them together and make fixed laws for their life together necessary; thereby the moral consciousness is educated gradually also to apply the concept of law to its own life. The highest law for a man's actions must be one that comprehends his whole being, thought and drive as well as action. From the outer, legal fulfillment of duty man is therefore led to the inner, ethical one, and gradually gains a higher standard, by which he can judge the laws of society. — In opposition to this ethi-

[*)] *Whewell*: History of Moral philosophy in England. 1852.

cal conception, which proceeds from an inner principle as standard and presupposition for the judgment of everything outer, the independent ethics, the ethics of principles (the morality of principles), stands the ethical doctrine that proceeds from the consequences of the action (the morality of consequences), from utility (utilitarianism), whose most important representatives are Epicurus in antiquity, Hobbes, Paley and Bentham in more recent times. This ethical empiricism overlooks, like the theoretical empiricism, the original presuppositions. —

One will easily find again in the view presented here Kant's fundamental thoughts, but one will find them again in a somewhat vague and indefinite form. Whewell's merit consists in his having carried through the history of the sciences with special regard to method and the problem of knowledge, and in his having asserted the originality and activity of thought in the process of knowledge against the empirical school. But he does not give what was found by the historical and critical examination a more penetrating *[97]* philosophical treatment. He is for the most part content, for each particular scientific domain, to infer back to an a priori idea, but does not investigate whether these ideas might not be reducible to one or at any rate a few, nor how they are related to the nature of consciousness, or how they have developed. This investigation is all the more necessary, since not only the ideas or fundamental concepts stand in an opposition to the empirical, which cannot be deduced from them, but also in a mutual opposition to one another, the concept of cause (i.e. of mechanical cause), e.g., to that of purpose. Several of the "ideas" he takes up even almost in quite popular form, e.g. the idea of purpose. He cites here Cuvier's words: "Zoology has a principle peculiar to it, which it applies with great advantage on several occasions, and that is the principle of the conditions of existence, which is usually also called the principle of final causes." But if one looks more closely, these words lead precisely beyond the popular idea of a purpose. For what Cuvier means is really nothing other than that a living being's structure and organs must be so constituted that its existence is possible; therefore the analysis of the conditions of existence (conditions de Texistence) can often lead to laws that agree with experience. But there need therefore be no question of a preceding adjusting of the individual to the conditions; the agreement may quite simply have its ground in the interaction of living beings with the outer conditions.

Whewell's view is, as is seen from the presentation, not that those fundamental concepts lie ready from the start in consciousness. He suggests, as likewise cited, in a single place, that the forms under which we conceive things already form before we become conscious of ourselves, so that we now know them only in the shape to which

the events of the unconscious life have brought them. This suggestion points in a right direction, as Whewell indeed on the whole maintains that the ideas spring from the
[98] activity of the mind, have no independent being. But all the more striking is it that he can content himself with a mere and bare enumeration of them without closer criticism and analysis. In this respect his opponent Stuart Mill has a great advantage over him.

While it cannot be denied that Whewell with regard to the general conception of the nature of knowledge has seen more correctly than Mill, he cannot nevertheless compare with the latter in the sharper specification of the course of inductive research. Mill holds fast to the exact standpoint, demands the strict logical proof. Thereby he is led to formulate the special inductive methods. Whewell emphasizes the mental productivity that comes to light in discoveries. Purely logically considered Mill is right when he says that by Whewell's determination of induction we do not get beyond hypothesis, because exact verification is lacking. Metaphysically and historically Whewell, logically Mill, has the right on his side. —

Whewell does not observe the limits that Kant fixed for the application of the fundamental concepts (the categories). The ideas that we must necessarily apply in considering nature and human life are, according to his doctrine, the only natural means by which we can form a concept of the Creator and Governor of the world. Just as we infer that every single thing must have its cause, just so we must infer that the whole world must have a cause. That there must be a first cause, he regards even as an axiom. We cannot stop at an infinite series of finite causes; we must posit a beginning; in order that the phenomena may become intelligible to thought, it must rise above the endless succession. And the moral ideas lead us to think that first cause as a spiritual providential power. — Whewell has written one of the so-called Bridgewater Treatises,[*)]
[99] which aimed "by way of natural science" to prove the Creator's wisdom and goodness as revealed in the world. His uncritical confounding of thought and experience and the resulting obscurity with regard to the rational character of knowledge comes to light especially in his theological ideas and their connection with the philosophical concepts. As easily as it comes to him to go to the idea of a first cause, so easily does it come to him to connect the doctrine of the Bible and of science. The moral ideas are not only to lead us to belief in a providence; they are also to ground the consequence that, when the moral ideal is not fulfilled, supernatural arrangements must have been made to realize it. To these arrangements belong especially the Bible itself, whose narrative of the creation of the world science, which does not reach up to the beginning of time, can

[*)] So called after an Earl of Bridgewater, deceased 1829, who set aside a sum for the publication of such writings.

neither confirm nor reject. — Here too we find an indefiniteness in the concepts, a lack of more penetrating criticism and of consciousness of the decisive differences, which diminishes Whewell's merits in the problem of knowledge.

II. *William Hamilton* (b. 1788, d. 1856). — This name leads us to Scotland, from which the first reaction within Britain itself against empiricism proceeded at the end of the last century. Thomas Reid's doctrine has since that time been dominant at the Scottish universities. It seems to agree with the national character. For its background it has a firm and earnest moral and religious conviction, as one may expect in the fatherland of John Knox; it keeps sober and calm within the limits of ordinary consciousness and seeks merely to present this consciousness's "facts;" but it nevertheless lays throughout the weight on experience and wants to apply the principles of Bacon and Newton, only that it does not with Locke and Condillac restrict experience to the sensible. It seeks to find the primitive and necessary statements of consciousness, which lie at the *[100]* ground of all other experience. Scottish philosophy is essentially empirical psychology, only that it seeks to point out facts of consciousness which ordinary experience, in its opinion, overlooks. It stands on the ground of empiricism, although it wants to dispute its consequences. It believes that it can find immediately primitive facts and stops at a series of principles which it regards as the last that can be reached. Thereby it becomes a kind of "systematic credulity" and sins against the true empirical method, which first recognizes a fact when scientific investigation establishes it, just as much as against the principle of philosophical analysis, according to which one fact cannot directly explain another, but both must be explained by a higher law.

The Scottish school thus points in two directions. The chief weight may be laid on the empirical tendency, and we then come, by a sharpening of the scientific method, to the standpoint of modern English psychology. On this path Thomas Brown (d. 1820) already struck out, just as Alexander Bain is connected through this with his Scottish predecessors (see above p. 66). But one could also bring forward the critical-speculative element, and thereby approach Kant. On this path Hamilton has brought the Scottish school beyond its vague and unscientific attitude. He brought to this task a deep and many-sided knowledge of Greek and German philosophy, altogether an astonishing learning in the history of philosophy, rare in England, which contributes not a little to the great interest and instruction his writings afford. But he was besides a keen logician and dialectician, an investigator who found the aim and yield of philosophical thinking in the very activity of thought and in the movement into which the highest mental powers are thereby set. He has not written much, but worked for many years

as professor of philosophy in Edinburgh. He himself published only some dissertations, which he added to his edition of Reid, and a collection of his articles in the Edingburgh
[101] Review under the title "Discussions on philosophy" (1852); after his death his lectures on metaphysics and logic were published by Mansel and Veitch in four volumes.

The first work that made Hamilton famous was an essay in the "Edingburgh Review" 1829, directed against Schelling's and Cousin's doctrine of the Absolute. It is an attempt to show that there can be no philosophy of the Unconditioned. We can know only the conditioned and the limited. The infinite, i.e. that which is unconditionally without limit, and the Absolute, i.e. that which is unconditionally closed in itself, we cannot grasp, cannot construct in our thought. Our thought is from first to last conditioned, indeed, to think is to make conditioned (to think is to condition). Thought cannot transcend consciousness, any more than the eagle can fly beyond the limits of the atmosphere; and consciousness has its definite conditions, to which every content of consciousness is subject. We conceive existence in time and space, not in and for itself. But time and space presuppose relations between different existing elements; what exists in time and space is therefore relative, and time and space cannot be applied to the Unconditioned. Consciousness presupposes furthermore an opposition between a knower and a known, between subject and object; but this opposition cannot be applied to the Unconditioned, which thereby would become relative. The only way out here would be, with Schelling, to assume that the Unconditioned is raised above the opposition between subject and object, is the indifference of both, and that in order to know this indifference we must raise ourselves above consciousness and reflection, which always presuppose plurality and relativity. But how can we raise ourselves above our own consciousness? And with what right can we posit a faculty that conflicts with the very laws of our consciousness?

One sees how Kant's doctrine is taken up by Hamilton and plays a leading part in his view. Yet he parts from Kant at a decisive point. Kant had indeed restricted the ap-
[102] plicability of our forms of intuition and of thought to the phenomenal and relative, but he nevertheless recognized the Unconditioned as a principle of reason, which indeed could not be laid at the ground as a constructive principle, but which has regulative significance, serves to lead beyond the relatively given and to set ideal tasks. In this Hamilton finds the germ of the systems of German speculation built upon the idea of the Unconditioned. The fundamental error is, in his opinion, that the Unconditioned is assumed to be a positive concept. Only the conditioned can we positively know and comprehend, embrace and represent with our thought; the Unconditioned, the nega-

tion of the conditioned, is unknowable and inconceivable, is a purely negative concept, like the Unthinkable. If one now would say with Kant that we nevertheless possess the Unconditioned as a positive, regulative principle, then a self-contradiction would be admitted in our highest mental faculties, which would necessarily lead us into skepticism. The solution is on the contrary quite simple, if one holds fast that we can conceive only the conditioned, and that the Unconditioned is for us a pure negation. The conditioned lies always between two extremes, which have the character of the Unconditioned; we cannot grasp either of them, and yet one of them must be the true. The world must e.g. at some time have a beginning or be eternal; but we can no more grasp an absolute beginning than an infinite eternity. We learn from this that we cannot make thought the standard of existence. We know only conditioned existence, not existence in and for itself. What lies beyond the conditioned is an object of belief. There must be an existence in and for itself; otherwise there could be no conditioned existence. "And by a wonderful revelation there is instilled in us, by the very consciousness of our lack of power to grasp anything that lies beyond the relative and finite, a belief in something Unconditioned beyond all the reality that we can grasp."

If philosophy were to have the Unconditioned as its object, it would be impossible. An absolute truth is inaccessible to us. But on such a truth the value and significance *[103]* of philosophy do not rest either. It is not finished results that it is after. A complete solution of the problems, which would stop all further discussion, would be a paralysis of philosophical striving and lead us back to an intellectual barbarism. Our being and our happiness consist in activity, and knowledge is of value only in so far as it is activity and striving, not dead possession. The significance and necessity of speculation must be sought mainly in the exercise of our highest mental powers that it brings about. Lessing is right: for us the eternal striving after truth is better than the possession of truth. A waking error is better than a sleeping truth. The highest to which philosophy comes is the recognition of our ignorance with regard to existence in and for itself. But there are two kinds of ignorance. We philosophize in order to escape the blind, thoughtless ignorance, which does not know the conditions of consciousness and of truth, and when we have come to know these conditions, we end in the higher, the conscious ignorance (docta ignorantia).

Hamilton thus posits an opposition between knowledge and belief. Only the latter reaches the Unconditioned. But what motives has it then to seek beyond the finite and to assert the positive reality of the Unconditioned instead of leaving it standing as a mere possibility, as a "Ding an sich?" These motives lie in the nature of man as a moral

personality. Man is conscious of an unconditioned law of duty, and moral responsibility presupposes in turn freedom of the will. The nature of man has its peculiar expression in the struggle between moral freedom and physical necessity. And only as a free moral being can he believe in a wise and holy ruler of the world. Admittedly an unconditioned freedom is inconceivable, but we know indeed that the limits of thought are not the limits of possibility and reality. By the recognition of this philosophy paves the way for the recognition of responsibility and freedom, which Christian revelation also presupposes. The end of philosophy is the beginning of theology.

[104] We have here reached the core of Hamilton's view of life. The relativity of knowledge gives place here to the moral and religious belief in the Unconditioned. The mental nature of man, as it is established by moral responsibility and freedom, was for him the highest, just as for Kant. His motto was: "On earth there is nothing great but man, and in man there is nothing great but mind." Stuart Mill opposes this motto, which has a decided spiritualistic tendency. In this core the opposition appears clearly between the two philosophers, the representatives of the two warring schools. Mill holds fast, like Hamilton, that we know only the relative and conditioned, but holds with right that we must then also conceive the nature of man as conditioned, that the method that leads us to insight into the laws of nature must also teach us to know the laws of human life, since human life itself is a link in the life of nature. Mill's strength lies precisely at this point; his conception of the concept of cause helps him beyond the abstractions of the doctrine of freedom and necessity. He has also clearly seen that Hamilton's philosophy is determined in its whole peculiarity by the idea of unconditioned freedom. For Hamilton Mill's doctrine had to stand as fatalism, and fatalism led, in his conviction, necessarily to materialism and atheism. The sciences that especially rest on the concept of necessity, mathematics and physics, he was therefore not free to regard with other than suspicious eyes. This remoteness of his from the natural sciences places him in opposition to the striving of the whole most recent philosophy, which goes precisely in the direction of a closer connection with them.

Mill was, as we have seen, more fortunate with the projectiles he cast into the fortress itself than with his attacks on the outworks. Hamilton's merit rests on the clarity and originality with which he has conceived Kant's doctrine of the relativity of knowledge, and Mansel has shown that Mill, as far as the main points in his at-
[105] tack on this doctrine are concerned, has not understood Hamilton. Moreover Mill, in accordance with his empiricist tendency, could not attack Hamilton at the really decisive point. This point we find in the relation between the Unconditioned and the

conditioned, from which Hamilton proceeds. The Unconditioned he determines as the negation of the conditioned. If one proceeds from this determination, one need not first show the impossibility of conceiving the Unconditioned; for then this concept is from the first self-contradictory. For if the Unconditioned has the conditioned outside itself as its opposite, then it thereby becomes itself conditioned and relative, and is thus canceled at the very moment it is posited. But what right has one to proceed from this presupposition of the opposition between the Unconditioned and the conditioned? It is a presupposition which certainly lies in the common consciousness and is contained in the traditional religious ideas. But the first step of philosophical thought must be to rise above this dualism.[*)]

The true Unconditioned must be that which receives its closer determination from the conditioned, — that in whose nature all conditions have their ultimate ground; the true Absolute must stand in an inner relation to the relative. Admittedly an immediate and absolute knowledge of the Unconditioned is therefore impossible; so far Hamilton is right. But we can through the knowledge of the conditioned gain decisive determina- *[106]*
tions of the essence of the Unconditioned, by virtue of the inner relation between them. Here lies a series of problems with which English philosophy has occupied itself only little, but which we find epoch-making treatments of in the great systems on the Continent, especially in Spinoza and Hegel, problems that inevitably press forward again, however often they are pushed aside.

Hamilton himself cannot carry through the opposition between existence in itself and the phenomena, the Unconditioned and the conditioned. He states (Lectures I p. 125) that from the peculiar nature of the phenomena we can draw many valid conclusions concerning the unknown principle whose revelations they are. Although therefore existence is revealed to us only in the phenomena, and we can only have a relative knowledge of mind and matter, we can nevertheless by inference and analogy rise above the mere appearances which experience and observation show us. But how could this be possible, if there were not an inner relation between existence in itself and the phenomena?

[*)] It appears in the history of thought in a twofold form. For the Greeks the finite and limited was the perfect, the infinite the lower and in the last instance the evil. Even Origen therefore conceived God as limited. In the Middle Ages (cf. Augustine and Anselm) the relation was reversed; God became the Infinite, eternally raised above the world of finitude. Immediately at the beginning of modern times, on the other hand, profound thinkers (Cusa, Bruno, Spinoza) sought the inner unity of the infinite and the finite. Cf. *Weisse*: Das philosophische Problem der Gegenwart p. 195 f. R. *Nielsen*: Mathematik og Dialektik. p. 117 f. — Hamilton has with his knowledge of the history of philosophy clearly seen this; he finds precisely already in Cusa the idea of the Absolute of the more recent speculative philosophy, against which he polemicizes.

According to Hamilton the end of philosophy is the beginning of theology. But the question now becomes, with what means theology is to build its doctrine. If we look back to the history of theology, we find that it has constantly made use of philosophical concepts or at least forms of concepts. But when now these concepts, when all our thought and knowledge concern only the conditioned, how then does a theological doctrine of the Unconditioned become possible? Hamilton says himself that no difficulty arises in theology which does not already show itself in philosophy. But then one must also conversely say that the difficulties that arise in philosophy must also hold for theology. It is then inconsistent when Hamilton in one place derives the imperfection and insignificance of English theology from its unphilosophical character. Consistent it is on the other hand when he insists that the statements of the Bible are to hold without
[107] reinterpretation, that the theologian's chief task is interpretation of the Bible, and philological learning therefore the only necessary condition for theology. Consistent it is also when his gifted disciple *Henry Mansel* has derived from his principles the impossibility of a scientific theology.

On the so-called Bampton Bequest lectures are held at Oxford annually in defense of the Christian doctrines. Such "Bampton-lectures" Mansel too has held, and he has here "used his short appearance in a theological chair to prove that there is no theology."[*)] He first declares himself against dogmatism as well as against rationalism. Dogmatism wants to deduce scientifically formed dogmas from religious belief; rationalism wants to reduce the religious ideas to symbolic expressions of abstract truths. Both aim at attaining a higher knowledge of the divine things. One thinks that when one abolishes the figurative and anthropomorphic, one will attain a truer knowledge of God. But the abstract forms that are put in place of the so-called figurative are conditioned by the nature of our consciousness and our knowledge, which is finite. We are not able to conceive the Unconditioned as a personal being, which we nevertheless must do for moral and religious reasons. Our personality is finite and conditioned and can therefore not be the form for the conception of the Unconditioned. Every attempt to develop a rational concept of God leads therefore, as the history of philosophy shows, to pantheism, which is incompatible with moral and religious belief. Therefore no scientific theology can be given. But since thought does not constitute the whole nature of man, since he as a moral and religious personality finds himself in a relation of dependence and obligation to a highest personal being, the object of his worship and the source of the law
[108] of his action,[**)] the religious doctrines must turn to all sides of man, appeal to his feeling

[*)] *Rémusat*: La théologie naturelle en France et en Angleterre. p. 75.

[**)] "To use the name of God in abstract speculation merely as a conventional designation for the highest

and will, indeed apply analogies and inferences of probability from the finite, but not ground their validity exclusively on the recognition of thought. We must thus sharply separate knowledge and belief. We cannot comprehend how the Unconditioned and the personal are united in the divine being; but we must believe that they are somehow united therein. Our thought can therefore not be taken as the standard for religious belief; we cannot form any scientific concept of God, according to which we should be able to judge the religious doctrines. — This is Mansel's doctrine of "the limits of religious thought," which has aroused so much attention in England in recent years.

It is a sign of the times that attacks are made on theology from so many different sides in our days. What has now been described, which proceeded from the very old bulwark of English orthodoxy, the University of Oxford, has this in common with R. Nielsen's polemic at home, that it does not proceed from a hostile relation to positive religion, but at the same time wants to assert the peculiarity of religious belief and the laws of scientific knowledge. Yet there is one essential difference between Mansel's and Nielsen's standpoint, and in one point, where one must admit that the English philosopher is more consistent than the Danish. Nielsen maintains, what Mansel denies, a philosophy of the Unconditioned. Having proceeded from Hegel's absolute idealism he holds fast also in his later doctrine to the possibility of a philosophical determination of the nature of the absolute spirit, a possibility which for him becomes one with the pos- *[109]*
sibility of knowledge itself (Grundideernes Logik I p. 53). Here then arises the difficulty of determining the relation between this philosophical idea of God and the conception of the Deity which the demands of the religious life shall lead to; there cannot after all be two absolute ideas, and the strife between philosophy and religion begins then anew with the question which of them is to decide what the *true* Unconditioned is. This Mansel, and already Hamilton, has clearly seen. They deny that philosophy can know the Absolute and Unconditioned, and thereby the place stands open for the religious ideas. Mansel remarks that the Greek philosophers could have a philosophical idea of the Absolute, of the principle lying at the ground of everything, without having to make it one with the deity of the popular religion; they could regard the popular religion's gods as derived personal forms of that Absolute, just as in the Theogony the higher gods have developed out of Chaos and Night. But within Christianity the absolute principle that one assumes must necessarily be made one with the God in whom one believes.

---

link in the chain of thought, and to believe in him for practical reasons in reverence and obedience, are *[108]*
two very different things; and only for the latter, not for the former, is the concept of God as a person necessary. If man were a pure being of the understanding, the problem of the Unconditioned would lose its chief difficulty; but he is also a being with religious and moral faculties, and these too demand to be satisfied by a valid solution of the problem." *Mansel*: The philos. of the cond. p. 13.

As much as one must grant Mansel right in this, it is nevertheless a question whether the opposition between belief and knowledge can be maintained, even when one conceives it as he does. Every positive religion will after all precisely teach what God and the divine is, and in particular the Christian church sets up a series of definite doctrines, which it demands be recognized; in the development of these doctrines it is, as the history of dogma also shows, impossible to keep thought and knowledge out. Belief can thus not be without theology, and it will therefore prove to be an illusion to think that one can overthrow all theology and nevertheless maintain positive belief.

It is only when one makes a dualistic distinction between the Unconditioned and the conditioned that one arrives at such an opposition between knowledge and belief. If one wants to maintain the supernatural, then it is quite consistent to recognize the
[110] impossibility of a grounding by way of thought. But the supernatural principle, which includes in itself a denial of the validity of thought, is as such foreign to philosophy. This can only conceive the Absolute as immanent, in its inner unity with the relative, and it also sees in the moral and religious nature of man no necessity of leaving this rational, human standpoint, since we have no other means to *know* true morality and true religiosity than precisely thought, knowledge itself. If there were, as Mansel declares, "legitimate sources of conviction, different from those that constitute the knowledge specially so called," then this conviction would have to develop according to a logic that is different from the one we know and apply, so that we got two kinds of logic — and the old strife would then begin again from the start. —

We now return to Hamilton. Stuart Mill's criticism of Hamilton's philosophy aimed partly at combating the attempt to assert a belief independent of knowledge; — and on this point at least Mill was not exactly fortunate, although he fought for the cause of philosophy; it concerned problems which he and his school have always pushed aside, and it was therefore a foreign domain that he here ventured into. Partly it was directed against Hamilton's logical and psychological doctrine, which we shall now characterize.

Logic is, according to Hamilton, a purely formal and a priori science. It is to take no account whatever of actual existence and its relations, but occupies itself only with the laws and conditions of thought itself. Concerning the truth or falsity of propositions in themselves logic decides nothing; for it everything can be true that does not contain a self-contradiction. Logic has thus to do only with the necessity that rests on the mutual relations of concepts, but can decide nothing concerning the real necessity that springs from the actual nature of things. Hamilton even reproaches Aristotle with having vio-
[111] lated the formal and abstract character of logic by mixing in considerations of the real

connection.

Within the domain of formal logic Hamilton has displayed much zeal and ability. He has attempted to set up a new theory of inferences, which we cannot however go into more closely here.*) But with regard to formal logic as a whole we must remark that Mill is right when he maintains that it may well serve to test whether our inferences are not self-contradictory, but not to show how we gain new knowledge. The extension that Mill has given to logic is therefore a real scientific progress. Formal logic tests the agreement of thought with itself, but does not solve the most important task, the agreement of thought with reality, the proper problem of knowledge.

Hamilton shares his general philosophical starting point with the earlier Scottish philosophy, in that he regards philosophy as the scientific presentation and development of the facts of consciousness.**) The original statements of consciousness, our instinctive assumptions, every philosophy must proceed from that does not wish to make itself nothing. What the Bible is to the theologian, that consciousness is to the philosopher. That those original statements are true, one must assume, "if the very root of our nature is not a lie." And the most important of these statements and original facts is the opposition between consciousness and its object, between self and not-self. Idealism, which cancels the not-self and makes it a merely subjective phenomenon, dissolves *[112]* everything into dream and shadows.

This is the same argumentation that Reid applied against Hume. But in two points Hamilton departs from Reid. He does not regard consciousness, like the latter, as a special faculty, different from observation and attention , but as one with immediate knowledge itself. We know an object immediately, i.e. we are conscious of its existence. We know ourselves immediately, i.e. we are conscious of our own existence. Hamilton next sets as a necessary presupposition that the primitive statements of consciousness are not self-contradictory. Only under this presupposition do these primitive statements, the principles of common human understanding, have validity above all derived phenomena of consciousness, whose validity rests on those.

Consciousness itself cannot be defined more closely, since it lies at the root of all knowledge. All that we can imagine and comprehend, we imagine by the help of consciousness. This is constantly presupposed. If it now itself were to be capable of being

*)In *Trendelenburg*: Logische Untersuchungen. 2te Ausg. II p. 304—307 is found a brief characterization and apt criticism of this "New analytic of logical forms." In particular it is shown how Hamilton's own theory leads beyond formal logic.

**)Philosophy in the proper sense thus has to do only with the mental, not at all with the material; cf. Hamilton's motto. Philosophy becomes only "philosophy of mind;" "natural philosophy" is not what we understand by philosophy.

illuminated and comprehended, then we should indeed have to have another consciousness, which could conceive the first, and so on to infinity. But although consciousness cannot be defined, it can nevertheless be analyzed. We can hold fast and compare the phenomena of consciousness and thereby infer the general conditions of the acts of consciousness.

Philosophy (as philosophy of mind) falls into three main parts. In the first, phenomenology or empirical psychology, the phenomena of consciousness are presented as they actually are found. They arrange themselves in three groups: knowledge, feeling and will. The second part, nomology or rational psychology, presents the laws that hold for these phenomena, and divides therefore into logic, aesthetics and ethics. The third part, ontology or "inferential psychology," finally draws from this results with regard to the nature of mind in itself; here are treated in particular the problems of the
[113] existence of God and the soul's immortality. — Hamilton has managed to treat only phenomenology and logic. —

Properly this view must founder on the same reefs as empiricism. It proceeds from empirical psychology and can only by an inconsistency get beyond this empirical foundation and set up laws for the true, the beautiful and the good. In any case the whole view would be purely subjective, since it is built only on the subjective phenomena of consciousness, — if it did not begin with the postulated presupposition that these phenomena have objective validity, since "the root of our nature cannot be a lie."

Yet on closer consideration it appears that Hamilton really has another starting point than that empirical-psychological one, that like Kant he proceeds from the original activity of consciousness. On this rests the critical-speculative element in him, whereby he offers interesting correctives to the doctrines of the empirical school.

All consciousness presupposes, he says, a duality, an opposition. Therefore all our knowledge is conditioned. But opposition and duality cannot be conceived except by comparison. Therefore there lies in every act of knowledge a distinguishing and judging. The comparing activity plays a part in the simplest observation. The first act of consciousness is the affirmation that something exists; but this presupposes a separation between its existence and its non-existence; thus a comparison of these two states. Next, a distinction is made between the self and the external object, between the different inner and outer phenomena etc. From the simplest to the highest and most composite states of consciousness we trace the comparing activity as a pervasive condition. Under this working consciousness follows certain laws, which indicate the conditions without which it cannot function. These laws are therefore the fundamental laws of

our knowledge (the logical and mathematical fundamental propositions); they are a priori, in their principle independent of experience, which follows from their necessity; a *[114]* real necessity experience cannot teach us. Only by that activity of consciousness and the laws it follows does knowledge come to be. Though knowledge therefore has its beginning in experience, it nevertheless has its proper origin in the mind itself.

Since Hamilton has such a conception of the nature of knowledge, he cannot with the English psychologists regard the laws of association of ideas as the only ones that hold in the domain of mental life. Nor can he conceive them as expressions of purely passive occurrences within consciousness, but must seek to trace them back to the energy of consciousness as their ultimate ground. As such an energy manifests itself already in the perception and observation of objects, so it is also due to the energy of the self that the idea of a certain impression is held fast and preserved so that it can later be awakened again. And this same energy works also in the association of ideas, whose general law may be designated as the law of completion (the law of redintegration): Ideas that belong together, i.e. constitute a whole for thought, either because they have earlier touched one another as successive or simultaneous, or because they resemble one another, have a tendency to call up one another. This law, which includes in itself the more special laws of the association of ideas, seems to have its ground in the unity of the active self, which also strives to bring about unity and connection among the ideas themselves. — In this way, as already shown above (p. 37 f.), association psychology, and with it empiricism, unravels itself and comes under a higher principle.

Association psychology believed it could especially explain the principle of causality from experience by regarding it as an example of an association of ideas which, on account of the complete confirmation it has won in experience, is fixed and indissoluble. But association of ideas can, Hamilton objects, only explain how we come to refer a certain phenomenon to a certain cause, but not how we come at all to ask for a cause. Most *[115]* philosophers who do not adhere to pure empiricism are accustomed to set up causality as a special principle, a peculiar law for our knowledge. According to Hamilton this is not necessary. The law of causality is according to his conception only a special form of the law of the conditioned, i.e. the law according to which our knowledge comprehends only the conditioned and relative. Since we cannot comprehend an Absolute or construct it in our thought, we can also not think an absolute beginning or an absolute end. When a thing arises, this is for us only apparent; we involuntarily presuppose that it has existed beforehand in another form, i.e. we derive it from a certain cause, or from causes, for there are always several. We conceive not existence absolutely or in itself,

but existence under the form of time. From existence as a whole not an atom can be taken away, any more than an atom can be added to it; we can comprehend neither how the sum of what exists could be increased or diminished. Ex nihilo nihil. Omnia mutantur, nihil interit. When anything begins or ends, it can only be as phenomenon. Even when we attempt to think the creation of the world, we always think the world as contained potentially in God's nature, so that creation is only a transition from possibility to actuality. — It is thus in accordance with the limitation and finitude of our mind, in accordance with the relativity of our knowledge, that we are compelled to think causes for all things.

This conception of the principle of causality has the merit that it strives to trace this principle back to the very nature of our consciousness instead of setting it as a separate isolated principle. It stresses especially the side of the causal relation that this indicates a connection between, a unity of the phenomena. Now Hamilton regards it indeed as a consequence of our limitation that we cannot do other than refer every event to an earlier one, from which it has developed; but when this referring shall mean that we conceive the phenomena as one in their ground and only different in their appearance,
[116] then lies it just as near to regard it as a perfection that our consciousness seeks to return to unity and does not remain at the phenomenal and accidental plurality. In its consistency this doctrine leads, as has rightly been remarked, to the idea of an eternal substance, whose manifestations in time the phenomenal causes and effects are, — that is, to the pantheism that Hamilton feared so greatly. Hamilton's doctrine here forms a complete contrast to empiricism, which sees in the relation of cause only a relation of succession, a connection between different phenomena without inner, necessary coherence. Kant has already shown that our judgments about things have objective validity only, concern real relations only and not dream-images, when the relation of cause is more than accidental temporal sequence. The law of causality is an expression of one of the forms under which our thought comprehends the given into unity. Such a unity we must, in virtue of our organization, presuppose in existence; we must in the last instance assume an eternal substance as the ground of all necessary coherence among the phenomena. It is then clear that Hamilton here, like Kant, himself points beyond the philosophy of the conditioned. The unity and coherence that we find in existence rests on this, that the Unconditioned is the inner ground of the conditioned, is that which conditions all that is conditioned. — And here we have a natural transition to the thinker who has developed Hamilton's doctrine as well as empiricism further in just the manner now indicated, who seeks in an original way to go beyond the imperfections of both,

and who may therefore be said to mark the high point of the philosophical endeavors in England in our time.

Chapter Four.

The Philosophy of Evolution.

It follows from the empirical character of English philosophy that it has seldom striven to gather its teachings into a closed system. It has always had the keenest eye for *[117]* the finite and conditioned in human knowledge, and yet every system seems to presuppose an unconditioned principle that can bring conclusion and unity to the conception of the world. The tendencies with which we in the foregoing have been occupied make no exception to this. Stuart Mill has his strength in the treatment of the single, isolated problems; these stand side by side in his work and are not brought into inner connection, although it is naturally the same fundamental view that we meet in his treatment of each of them. Mill has no inner principle; his principle is indeed that there is no principle, but that all outer and inner phenomena group themselves according to laws that possess no necessity valid in itself. William Hamilton could likewise not strive for a system, since his chief teaching indeed was that the Unconditioned is wholly inconceivable to us; and although he regarded necessity as more than a mere outer connection in space and time, it was yet in his view only a consequence of our limitation that we apply the concept of cause to things; with regard to the Unconditioned this concept had no validity.

What gives *Herbert Spencer* his unique significance in English philosophy is therefore not least his systematic endeavor, his endeavor everywhere to gather the scattered single features into a comprehensive view. He is not content to treat the single problems. Although he possesses an astonishing knowledge in the domain of almost all the special sciences, he regards it yet merely as the material from which a new, all-embracing structure is to be raised. He is a rare example of a union of analytic and synthetic gifts. With the other English philosophers analysis is the predominant element; what is given and at hand is tested and resolved into its elements, traced back to its simplest forms. They do not, on the other hand, strive for such a reconstruction of the given that its development might come to reveal its nature in its whole coherence. From the simplest forms, the invisible germs, the synthetic thinker seeks step by step to derive the highest *[118]* and most significant functions, in that he grasps the law valid for the whole of evolution.

It is this at once comprehensive and profound view that makes Spencer, more than the other thinkers who have proceeded from the older English school, have an eye for the turning point to which empiricism in our day has come. He is not content to return to the presuppositions and principles by which empiricism abolishes itself, but consciously draws their consequences, sees them in their significance as the foundation of the whole view of the world. It is the influence of Hamilton and the critical school that lets him look more sharply at the metaphysical domain than the empiricists are able to. The more profound philosophical grounding, which can be won only by tracing the laws of thought and of reality back to a principle that underlies both, this grounding, which empiricism could neither seek nor find, Spencer endeavors to give.

But despite this metaphysical tendency Spencer will not leave the domain of experience. He still counts himself among the philosophers of experience, although he polemicizes against pure empiricism, which in the end must end in the want of principle. He differs from the empiricists not only in the more profound grounding that he seeks, but also in the new light that on the foundation thus won he casts on the factual determinations in which empiricism rests content. We have seen earlier that this halting at the positive and factual is precisely what brings contradiction into the empirical view, in that the single determinations stand fixed and immovable over against one another, — that at some points an attempt is indeed made to bring movement and development in, but that the atomistic character of empiricism hinders this endeavor, and that movement and development in any case are not laid down as the governing standpoint. Otherwise with Spencer. The fixed forms melt, life and movement arise in the
[119] dead masses. Evolution becomes not an isolated fact that one comes upon at one place or another, but the expression of a world-law that rules in all phenomena. And hereby the way is paved for a kind of dialectic of positivity, which overcomes and reconciles the oppositions by ordering them as members in the infinite movement.

. Spencer's endeavors have in recent years won deserved recognition. This is seen not only from the wide diffusion of his writings in England and North America and from the translations into foreign languages (French and Russian), but also from the pronouncements of eminent men of science. George Lewes raises in his History of Philosophy the question whether there has ever arisen a more eminent thinker in England. And although Stuart Mill, on account of Spencer's criticism of empiricism, always mentions him with a certain reserve, he declares him to be Auguste Comte's equal, no small praise in his mouth. The famous naturalist Huxley says of Spencer's chief work: "The only complete and methodical presentation of the theory of evolution that I know is

found in Herbert Spencer's 'philosophical System,' a work that ought to be carefully studied by all those who wish to make themselves acquainted with the tendencies of the scientific movement."*) — But it is also only now, when his great work is approaching its completion, that Spencer has come to be recognized. His endeavor was foreign to the English mental tendency; he is open and resolute in his line of thought and in his pronouncements, and shows not the empiricist circumspection that lets even men like Stuart Mill and Darwin accommodate themselves to the prevailing ideas; — therefore he could not count on sympathy, but had to feel himself out of place in English society. "Amid the general indifference Spencer has remained unshakably true to philosophy. He must surely have possessed a heroic courage and a rare feeling of independence to *[120]* be able to devote himself to rigorous studies that could procure him only isolated and unnoticed expressions of approval. With the talent, the mental fruitfulness and the almost all-embracing manifoldness of knowledge to which his writings bear witness, he would, had he consented to follow the beaten paths, have easily obtained all the gifts that English society bestows in rich measure on those who serve it in the way that it itself wishes to be served. He has preferred to dedicate himself to poverty and to — what is still harder to bear — obscurity. But Spencer deserves more than empty declarations of sympathy" etc.*) In character and view of the world Spencer seems to have much in common with Spinoza. —

To give at once an idea of Spencer's teaching we shall bring forward the main thought that dominates it from beginning to end, the idea of evolution. This idea is for Spencer the result of a careful analysis of the facts of experience; it states a law that rules everywhere in the world of nature and of mind. And on the other hand only by laying this idea at the foundation can one synthetically present the whole content of our knowledge. Spencer never tires of presenting his idea from both these standpoints and of showing its truth in all domains. His starting point was originally in the ethical and social domain; here he first saw the law of the evolution brought about by natural causes hold. But a firm form, a greater coherence came into his views only when he came to know the truth "which was first obscurely hinted at by Harvey's embryological investigations, which was afterwards grasped more clearly by Wolff, and which was brought into a definite form by von Baer — the truth that all organic evolution is a transition from a homogeneous to a heterogeneous condition." In one of his first writings, *[121]* "Social Statics" (1850), he presented not only the evolution of man and of society, but

*)These pronouncements are found cited in *Ribot*: "La psychologie Anglaise contemporaine," who himself also gives a striking and sympathetic characterization of Spencer (p. 145—152).

*)Aug. *Laugel.* Revue de deux mondes. 15. févr. 1864.

also declared that it was in principle the same law that held for organic and for social evolution. Afterwards he was led to subject this law to a closer investigation, which led both to a rational grounding of it and to setting up more forms of the general law of evolution than he had done at the outset.[*)] This investigation is contained in his "First Principles" (1862). But before we pass over to it, we shall make some general remarks on the extent and the light in which Spencer conceives the law of evolution.

Astronomy shows us, according to Laplace's hypothesis, how the original mass of nebula gradually articulated itself and was transformed, so that the present solar system proceeded from it. Geology shows how the earth from its original glowing condition, which was a consequence of the heat developed by the concentration of the nebular mass, has attained its present condition through a series of changes: the cooling and solidification of the earth's crust, the distribution of land of water, the bedding of the different strata, etc. Organic life shows us a similar process both within the history of the individual and within the history of the species. It is always the higher, richer and manifoldly developed forms that arise latest. As regards man, we can point out a whole series of stages from the half-animal savage to the cultivated European. With regard to every single human endeavor, too, the same holds, whether we follow the history of language, of art, of science, of commerce or of industry. All phenomena point to the same law. But from this it follows on the other hand also that this law is only a hypothesis to which we are of necessity led; we cannot ascribe to it absolute
[122] validity, since we do not know the Absolute and thus cannot know whether this law has application to it. The great problems concerning the essence and ground of things are not solved hereby; the last mystery is only moved one step back, but remains in itself just as obscure as it has always been.

In general one conceives the idea of evolution and of progress in a one-sided teleological manner, as if all stages in evolution were only to have as their end to further human felicity. But this is a finite and purely subjective standpoint. Philosophical inquiry asks, on the contrary, which laws hold for the phenomena, for the constant changes and progress, quite apart from our interests, — asks what evolution is in itself, and what its causes are. And as evolution itself is only the expression of a phenomenal law, so also its causes can only be phenomenal and relative; the absolute cause is inaccessible to us.

As the law of evolution concerns only the relative and the phenomenal, so it is in itself an expression of the principle of relativity. When all is in evolution, then all is also only relative. Therefore Spencer often emphasizes how impossible it is to give sharply

[*)] *Spencer*: The classification of the sciences. 3d. ed. London 1873. p. 46.

delimited definitions. The time of absolute boundaries is past. One cannot point to any point at which mental life begins; there takes place a successive transition from the purely bodily functions to the mental ones. Just as little can one fix any boundary between the organic and the inorganic phenomena, between the living and the lifeless. The newer physics shows us what inner coherence there is between the different forces, electricity, magnetism, mechanical force, heat, etc.; the one of these can be converted into the other. Science itself stands in no absolute opposition to popular consciousness; it commands no means and forces that are not already present in this consciousness, but marks a higher stage of development of these same forces, an extension of the field of vision, a more consistent and more exact carrying out of the points of view. *[123]*

The law of evolution is the expression of the fact that the view of the world based on relativity has become conscious of itself. It no longer falls out into the want of principle and incoherence, but gathers itself in one principle. Just as the critique of the concept of matter in the most recent philosophy of nature has led to putting materiality in the place of matter, so one may say that Spencer has put relativity in the place of the relative. But where there is a principle, there is to that extent also an Absolute, an Unconditioned. In setting up a principle and developing on the basis of it a system, he therefore goes beyond empiricism, and he is conscious of this. By consistently carrying through and thinking through the views of the empirical realistic school he has got beyond it and has grasped thoughts that underlie the speculative (idealistic) tendency. He also expressly sets it as his task to reconcile Locke and Kant.

But we can already here indicate where the most difficult point in Spencer's philosophy lies. For the principle to which the relative is traced back, and in which the law of the phenomena has its ground, cannot be sought elsewhere than in the Absolute and Unconditioned; — otherwise it would not be the true principle, but another would have to be sought. The relative can be gathered under one principle only if one presupposes that the relative and phenomenal stands in an inner relation to the Absolute and Unconditioned; only from this can all unity and coherence be derived. Every real total view must mark a progress in the knowledge of reality itself; the nominalistic thought that only the isolated fact has reality dissolves itself in the recognition that precisely unity and totality is the true reality. And toward such a recognition Spencer's own philosophical view also points.

The principle of relativity abolishes, as we have seen, the fixed boundaries. But when all boundaries fall, how should the boundary between the relative and the Absolute be *[124]* able to remain standing? Must not this boundary, which for Spencer is one with the

boundary between the knowable and the Unknowable, itself become relative and fluid, i.e., be subjected to the law of evolution? — There seems to be no other way out, if Spencer will not fall back into the "pure empiricism," which he combats. The dualism between the Absolute and the relative would make Spencer's own endeavors toward a "synthetic philosophy" fruitless.

Spencer maintains, as we shall see, expressly the necessity of the idea of the Absolute as the last principle, the last presupposition of all thought and experience. Indeed, he even intimates that the essential forms and laws of existence that we can know must also be an expression of the nature of the Unconditioned; he shows how the idea of this in the course of the ages, under the development of religion and science, has assumed ever higher and more perfect forms; — but herein it is implied that it cannot be absolutely unknowable. If one admitted an absolute principle, but held the relative outside all contact with it, then this principle would be not only an unknowable, but a meaningless concept.

The uncertainty that we find in Spencer on this decisive point is naturally brought about by the twofold influences he has received, — from the empirical and from the critical school, and it could hardly be avoided in a thinker who has set himself so grand an aim as that of uniting the two opposed currents in the newer philosophy. The question might now be raised which of the two currents gains the upper hand in Spencer's view. If I conceive this rightly, the result in the last instance seems to be that Spencer, in a still higher degree than he himself is aware, has overstepped the boundaries of empiricism and approached the ideal conceptions that have worked their way forward through the philosophical systems of the Continent. The grounding of this the following presentation shall give. —

[125] Spencer has sketched and in part already carried out a grand plan. In the year 1860 he issued a subscription prospectus for a philosophical system, a "synthetic philosophy," which was estimated at ten volumes. Of these the first five are available. The first volume contains, under the name of "First principles," the foundation of the whole view, in that it investigates the relation between religion and science, sets up the presuppositions on which all thought and experience rest, and the general laws that emerge as the last results of the investigations of the special sciences, and also shows how these laws can be derived from those presuppositions. It is thus a metaphysics. The two next volumes give, under the name of "Principles of Biology," a presentation of the conditions and development of organic life, and show how the forms and functions of life are formed under interaction with the surrounding world. "Principles of Psychology," likewise in

two volumes, presents in a corresponding manner the development of mental life in the struggle with its surroundings. Of the five volumes that remain, the three ("Principles of sociology") are to contain the science of society, the last two ("Principles of morality") ethics. — Besides the writings mentioned here Spencer has published several smaller works. The "Social Statics" already mentioned develops some of his ethical ideas; "The classification of sciences" gives, besides the subject stated in its title, a determination of his relation to positivism; besides this he has collected a number of scattered, very interesting treatises in two volumes "Essays, scientific, politic and speculative." — In our presentation we follow his own systematic order. Only thus can we get an idea of the unity that runs through his view, and of the energy with which he seeks to make the different streams of knowledge unite into one onward-hastening river. —

The sharpest opposition in which different views can stand to one another is that which we find between religion and science. It dates from the very first observation and discovery of a law, of a regular coherence in nature, and it has repeated itself at every later stage of the development of religion and science. Yet it is not an irreconcilable *[126]* strife. Here as everywhere there must be something on which both the contending parties are or can become agreed. Even in the false there is "a soul of truth;" even the wildest superstition must enclose a justified element. Otherwise one could not understand how religion has been able to hold its own in spite of the attacks of science, repeated again and again, on its dogmas. Even if one will trace the dogmas back to the religious feeling as their source, this feeling itself still remains as so essential a fact that every philosophical theory that does not explain it is incomplete. If one assumes that this feeling is immediately created, then one must also assume that it corresponds to its author; if one assumes that it, like all mental faculties, has developed under the interaction of individuals with their surroundings, then one must also assume that there are definite real conditions to which it corresponds. In both cases we are thus led to regard the religious feeling with respect. — What all religions have in common can only be the truth that lies at the ground of them all; and likewise what religion and science have in common can only be an abstract truth in which they both meet. If it succeeds in demonstrating this truth, in which the two poles of human consciousness meet, then it will appear that the strife between religion and science has been of the same nature as the fight between the two knights over the color of a shield, of which each had seen only his own side.

The highest religious ideas concern the nature and origin of the world. This question has been answered in three different ways. According to atheism the world exists by itself and is not produced; according to pantheism it has produced itself; according to

theism it is produced by an external cause. The atheistic conception is untenable, since we cannot form an idea of anything that has no origin; existence in and by itself is for
[127] our thought something inconceivable. In any case this conception gives us no answer to the question, no explanation of the existence of the world. Pantheism too is untenable: what produces itself must beforehand have been in existence under another form, — and the question then returns into the infinite. In the same way it fares with theism: it leads back from the world to the Creator and assumes the Creator to exist by himself; — but then we end once more here at the concept, inaccessible to us, of something subsisting in itself.

The critical consideration thus demonstrates the untenability of all the main forms that the religious idea has assumed. We cannot, as Hamilton and after him Mansel have shown, form any concept of the Absolute and Unconditioned, therefore every concept of God is full of contradictions.

From this we learn that the truth in the religions cannot consist in the way in which they solve the problem of the nature and origin of the world. We must rather seek their truth in the very acknowledgment that here is a problem, that there is given a mystery that forms the background of existence and lies beyond the reach of our knowledge. All religions acknowledge a mystery, but seek nevertheless, each in its own way, to give a solution *of the riddle, a revelation, whereby the mystery is then again in fact abolished. Yet it appears that the higher a religion stands, the higher the Unconditioned is raised above the domain of knowledge. Lowest stands the fetish-worshiper, who imagines his god under the most everyday and finite forms; polytheism shows us already the Godhead under more ideal shapes; monotheism erects altars to the unknown and unknowable God, and recognizes at last that a God whom we could comprehend would not be any God, and that it would be blasphemous to think that God is as we can think him. The mystery is not, as the religions suppose, a relative, but an absolute mystery. When the religious consciousness has raised itself to this point, it will be reconciled with science.

[128] For it goes with the highest scientific ideas as with the highest religious ideas; they are self-contradictory when they are regarded as absolute. What force and matter, space and time are in themselves, we can know nothing about. At no point do we reach a conclusion. We can find general laws, but these point ever back to still more general laws, and so on. Our thought is, as Hamilton has shown, conditioned by opposition and difference; what has no opposite and cannot be designated by its difference from another, we cannot think. On the other hand all knowledge also presupposes a relation

of likeness; we know a thing by referring it to another like it; but the Absolute, that which subsists in itself, we cannot compare with anything other than itself. Finally, all our knowledge is subjective, consists in the agreement of our states of consciousness with the outer phenomena; therefore it is necessarily also relative, does not reach the nature of things in themselves.

The question then presents itself: is our consciousness limited to the mere phenomena, to the finite and relative? Seen purely logically the matter seems to stand thus, that the Absolute, as Hamilton says, is a purely negative concept. But on closer consideration the matter stands otherwise. There must after all be something else in consciousness than the very limits and conditions of consciousness; there must be something that is limited and conditioned. Every definitely formed state of consciousness comprises only a relative; but it presupposes an indefinite, unformed content, an Unconditioned and Infinite, which is the necessary material for the work of thought. The very concept of the relative presupposes as its necessary correlate the reality of the Absolute; otherwise the relative would indeed be absolute. Every real thought is finite, but points beyond itself; every existent that we think points beyond itself. Every new form that thought wants to give the Absolute falls before criticism, but the Absolute then creates other forms for itself, and so on to infinity. If the Absolute were not in consciousness, thought would lack content, just as it would lack form if only the Absolute were. There is something that is *[129]* conditioned, something that stands in the relative relations, and which we can express only by successively abolishing all conditions, all limits. We then come to the positive though indefinite consciousness of that which lies beyond all definite consciousness, of existence in and for itself, of a substance behind all phenomena, a being behind all appearances. This consciousness is the necessary counterpart of our self-consciousness.

"Besides the *definite* consciousness, whose laws logic formulates, there is also an *indefinite* consciousness, which cannot be formulated. Besides complete thoughts, and besides the incomplete thoughts that can be completed, there are thoughts that it is impossible to complete (to carry through), and which are nevertheless also real in the sense that they are normal states of reason" (normal affections of the intellect). — "Since our consciousness of the Unconditioned is literally the same as the unconditioned consciousness or the raw material of thought, to which we by thinking give definite forms, it follows that an ever present sensation (sense) of real existence is the very foundation of our mind."

Religion and science therefore belong necessarily together, as two forms of consciousness supplementing one another. Our consciousness of nature is, seen from one

side, religion, seen from another side, science. Science attacks every single supernatural fact that religion lays down, but at the same time it concedes that its own results are only relative, do not reach the absolute mystery.

But are we then not compelled to represent the Absolute to ourselves under one form or another? — Auguste Comte supposed that the theological concept of a providence and the metaphysical concept of nature had played out their role, and that the ideal that now remained was that of positive science: to trace all single facts back to one single universal fact. Against this Spencer objects that the highest religious, metaphysical
[130] and scientific idea is in itself one and the same. When religion has freed itself from all anthropomorphism, it becomes the belief in an absolute being that indwells all phenomena; and science leads us at last to the recognition of a universal force, one existence, which as universal and absolute is inconceivable to us. And when Comte held that the religious feeling will hereafter have humanity for its object, this conflicts with the law of the development of religion, which shows a steady advance from the finite toward the infinite; the consciousness that has raised itself to the idea of the Unconditioned cannot again find its highest object in a finite being.[*)] — According to Hamilton and Mansel it is a duty, which with necessity springs from our nature, to think God as a personal being. But it can be a duty neither to affirm nor to deny God's personality. Our duty is only to recognize our limitation and not go beyond the barriers of our thought. There can be no conflict between our intellectual faculties and our moral obligations. When we refuse to believe in God's personality, it is not because it is too high a determination, but precisely because it is too low, finite and human a determination of the Unconditioned. Might there not be given a form of existence that stood as high above consciousness and will as these stand above purely mechanical motion? We can certainly form no concept of such a form of existence; but that is not a reason to doubt its existence; — we have indeed seen that the conditioned cannot grasp the Unconditioned. And yet thought will perhaps ever continue its attempts to find expression and definite forms for the absolute being that is its own background and basis. Nor will there be anything wrong in this, so long as such definite forms are expressly recognized as mere symbols without inner
[131] correspondence with what they signify. Under the constant formation of such symbols and the ensuing rejection of them as inadequate, consciousness is kept alive to the opposition between the Unconditioned and the conditioned. The adherents of the positive religions cling fast to the finite forms of the Unconditioned, as if they could be absolute, and are therefore less pious than the thinker, who knows that all such forms are only

[*)] The classification of the sciences. p. 35-36. 41.

inadequate symbols. And even if he stands alone with this conviction, he yet knows that it develops with necessity and will have the future on its side. "He must remember that just as he (with all his faculties, endeavors and convictions) is a child of the past, so he is father to the future, and that his thoughts are like children born to him, which he must not let die for want of care. He may, like every other man, with right regard himself as one of the countless organs through which the unknown cause works, and when the unknown cause produces a certain conviction in him, then he is authorized thereby to express it in speech and action. For — to apply the poet's words in their highest sense — 'Nature cannot be improved by any means unless Nature herself has produced this means; above the art which you say adds something to Nature stands an art that Nature herself produces.' Therefore the wise man will not regard the conviction that stirs in him as accidental. He will without fear utter the highest truth he can see, because he knows that whatever the consequence may be, he thereby plays his proper part in the world; — because he knows that *if* he can bring about the change he strives for, good! — if he *cannot,* also good, though not *so* good!"[*)]

One sees that Spencer makes himself no illusions with regard to the reconciliation between religion and science that he believes he has found. It is also clear that the pos- *[132]*
itive religions cannot enter upon this reconciliation without giving up precisely that which makes them positive, namely the belief in a supernatural power revealed under certain definite forms. According to Spencer the Absolute is the presupposition to which every inquiry into the nature of consciousness and of existence of necessity leads back. It does not stand in dualistic (supernatural) severance from the phenomena, but in immanent relation to them, is "the unknown cause," "the universal force," which underlies them. Therefore it is not clear how Spencer can go on designating the Absolute as the Unknowable; it would be so only if the phenomena did not stand in inner relation to it, so that they could not furnish even an indirect contribution to the conception of it. Consistently Spencer would have to conceive the phenomena as relative forms and expressions of the Absolute, as determinations of content, in which it expresses its nature, so that through them we could win a real, though conditioned and relative, knowledge of the Absolute. This appears clearly when we bring forward Spencer's determination of the task of philosophy and its first presuppositions.

By philosophy he understands knowledge developed to unity and totality (completely-unified knowledge). It seeks the general laws that comprise the particular laws, which are the objects of the single sciences. In that philosophy everywhere seeks unity and

[*)] *Spencer*: First Principles. 3d ed. p. 123.

agreement, it presupposes the validity of the function of consciousness by which we conceive things as like or unlike one another. Even the most skeptical thought must acknowledge this validity; for doubt itself can be maintained only by means of that function of consciousness that underlies every inference, both denial and affirmation. But besides this function itself a result is also presupposed, to which it has led. Our ideas divide into two great groups, which cannot be made one: a series of lively ideas, which we comprehend under the name of object and refer to outer things, and a se-
[133] ries of weaker ideas, which we comprehend under the name of subject or self. This distinction is the result of a series of acts of consciousness, which establish likenesses and unlikenesses between the ideas. The subjective and the objective, self and not-self, stand thus as fundamental oppositions within the relative, as the two main forms of the manifestation of the Unknowable. The relative reality that our knowledge comprises we must of necessity think in inner connection with the absolute reality, inaccessible to us. The fundamental conditions under which reality appears to us, — force and matter, time and space, motion — forms that underlie all conception and experience, we must therefore ascribe real validity. True, we have no right to assume that they have absolute reality, are forms of the Absolute itself; but since these forms have for us an unconditioned and unchangeable necessity, we must also assume that the unknown, absolute force acts unchangeably on us: without such an unchangeableness those forms would be unthinkable. In the last instance all those forms can be traced back to force: matter and motion are only variously conditioned manifestations of force, and space and time are the conditions under which these manifestations appear to us. Force is also the proper and original object of all consciousness. The fundamental character of consciousness consists indeed in the conception of likeness and unlikeness, thus in a comparison, but this presupposes difference between impressions; we conceive thus that which brings about change, — but we can only conceive it by means of the sensation we have of our own force to bring about changes. This consciousness of force becomes thus the last point to which analysis leads us. It is naturally not the absolute force that we here conceive, but only a conditioned effect of the unconditioned cause.

The existence of force is now the necessary presupposition for all science and philosophy. So long as there is thinking, so long as consciousness functions, so long must
[134] there also take place transitions and changes: but thereby it is presupposed, then, that force exists, that matter is not annihilated, that motion is steadily continued. If force ceased to act, if matter became nothing, if motion stopped absolutely, then we should get an act of consciousness that consisted in a relation between something and nothing,

i.e., a relation in which the one term was lacking, i.e., a relation that is no relation, a self-contradiction. An absolute end we can just as little think as an absolute beginning, indeed, we cannot think of any consciousness for which this could be otherwise. Every single form of force we can think of as converted into another, but force itself we cannot abolish. It is not any single, no relative force that exists, but force as a whole. We win here thus a new standpoint for the truth that was maintained above, that we must necessarily presuppose an Unconditioned as background and bearer of everything relative and phenomenal. The force whose existence we learn is the absolute force, of which we have an indefinite consciousness as the necessary correlate of the force we know. To maintain the existence of force is thus only another form of maintaining an unconditioned reality without beginning or end.

What thus follows from the nature of our consciousness, a priori, is confirmed a posteriori by the results of modern physics and chemistry, which establish the persistence of force and the indestructibility of matter as facts of experience. Indeed, every single experiment properly presupposes this fact; for as soon as there is to be weighing or measuring, a unit of force must be laid at the foundation, which must be assumed constant; but if force did not exist, one would not have any certainty of the constancy of this unit, and all measurement, all exact experimentation, would thus be impossible.

The only truth that goes beyond experience, in that it lies at the foundation of experience, is the existence of force. As the foundation of experience it must also be the foundation of every scientific organization of experience. To it a carried-through anal- *[135]*
ysis leads us back, and upon it a rational synthesis must be built.

From this fundamental presupposition of the existence of force it is then again a necessary consequence that there must be a fixed lawfulness in nature. When in two given cases complete likeness obtains between the antecedent conditions, then the consequences must also be the same; — otherwise we should come to the consequence that either an entirely new force must have arisen, or a force had ceased to exist; but in both cases we should come into conflict with the proposition of the existence of force, which cuts off an absolute beginning and an absolute end.[*)]

Likewise it follows from the existence of force that the different single forces can pass over into one another, so that a certain degree of the one force is equivalent to a certain degree of the other force. The apparent cessation of a single force means only that it is converted into another form. Thus mechanical motion, heat, light, chemical attraction, electricity, etc. can be converted into one another, indeed they can be converted into

[*)] One easily sees that this presupposition underlies Mill's "four methods for experimental inquiry" (above p. 28 f.).

sensation, feeling and thought, as these can be converted into those. *How* this conversion takes place, we do not know. How vibrations in the air can call forth sensations of sound, chemical changes in the brain mental states, these are mysteries that we cannot grasp, but not deeper mysteries than the conversion of the physical forces into one another. These conversions are not merely empirical facts; it follows from the fundamental law of consciousness itself that every manifestation of force must be a consequence of a preceding manifestation of force, and that at its cessation it must pass over into another kind of manifestation of force; if not, the proposition of the existence of force is abolished and with it consciousness itself. — In a similar way it can be proved that motion must always go in the direction where the least resistance is offered, and that motion,
[136] on account of different forces acting simultaneously, must become rhythmical —

What we have found so far are only the abstract laws that hold for the single factors. But the knowledge of unity that philosophy seeks is completed only when we turn to the concrete phenomena that correspond to and can be derived from those abstract laws. With the concrete phenomena in themselves philosophy has nothing to do; they are investigated in the special sciences. But when the geologist has explained to us the history of the earth, when the chemist has taught us to know the combinations and changes of substances, when the physiologist has found the law of the growth of the organism, then there arises the question whether there is not something common to all these different processes, whether elements cannot be pointed out that recur in the history of all these concrete phenomena.

The concrete phenomena have matter and motion as their elements. The law of their history must therefore be one that states more precisely the form of the constantly renewed distribution of matter and motion. Now every existence that we know undergoes two different processes. It comes to be for us in that elements that formerly were in a scattered and confused condition gather into a whole, in that matter is concentrated and the single parts lose their motion. This is what we call evolution, which thus consists in the gathering of matter and dispersion of motion. The other process that the phenomenon undergoes is a dissolution, which conversely consists in the absorption of motion and dispersion of matter. Evolution and dissolution designate the two main periods in the history of every phenomenon.

Evolution, whose general character has been stated as a gathering of matter and dispersion of motion, must now be determined more precisely by way of induction and experience. We must in astronomy and geology, in biology, psychology and sociology
[137] seek the more special peculiarities of evolution, as it reigns throughout the whole uni-

verse, through all manifestations of the unknowable fundamental force.

The first of these more precise determinations consists in this, that evolution goes from a less coherent to a more coherent condition. According to Laplace's hypothesis the solar system has condensed from an immense mass of nebula into the single globes of which it now consists; and each of these globes has itself undergone a process of condensation. Every plant grows by concentrating in itself elements that before existed in a scattered condition; every animal grows by again concentrating in itself elements that before existed scattered in plants or other animals. Human history shows us an ever closer union between families and tribes, until there now seems to be forming a civilized society that embraces the whole earth; and if we compare a civilized state with a band of savages, we shall at once see what a difference there is in concentration.

But the transition from a scattered to a concentrated condition is at the same time a transition from a homogeneous to a heterogeneous condition. The original mass of nebula became, during its concentration, gradually articulated: rings formed, which were detached from the main mass, and which again divided into globes, until our present solar system with all its inner differences developed. The earth was at first a glowing mass; then the crust solidified, and there came to be an opposition between it and the inner fluid and glowing core; on the surface of the earth there developed differences between land and sea, mountains and plains, climatic differences, etc. From its first homogeneous germ the organism develops into a rich manifoldness of parts and organs. Human society shows us the same phenomenon in what is called the division of labor; originally everyone had to produce for himself all that he needed; gradually the different labors have become divided, so that everyone gets his occupation.

The transition from the homogeneous to the heterogeneous brings with it a transition from the indefinite to the definite. Everywhere order takes the place of confusion. *[138]*
This is seen most clearly in the evolution of the organism. Its structure and its organs become constantly more formed and articulated. From a gelatinous mass it develops into a definite, bounded whole with sharply marked parts.

If we now add to this that it is not matter alone, but motion also, that undergoes these changes, — the functions of the organism developing thus parallel to its structure, — we get the following complete definition: Evolution is a gathering of matter and a simultaneous dispersion of motion, in the course of which matter passes over from an indefinite and incoherent homogeneity to a definite and coherent heterogeneity, and in the course of which motion undergoes a parallel transformation.

Experience demonstrates that such an evolution takes place everywhere. Celestial

bodies, organisms and human societies have in essentials the same history. But what experience thus teaches us, we must give a deeper grounding; we must point out the causes of evolution (naturally relative and phenomenal causes; the absolute, noumenal cause is inaccessible to us), and these causes we must derive from the highest truth, which lies at the foundation of all experience and therefore goes beyond all experience, the proposition of the existence of force. — It is clear that in the homogeneous mass, which always forms the starting point of evolution, the single parts must receive different influences from the surroundings. There must first form an opposition between the inner and the outer, and next between the different parts of the outer and of the inner. The homogeneous is always unstable and therefore passes of necessity over into difference. Therefore, e.g., a species of plant or animal must vary on account of the different conditions under which the different individuals live. Otherwise different forces would have the same effects, which conflicts with the proposition of the existence of force. —
[139] But when different parts are thus formed, then also one and the same force must have different effects on the different parts. The force becomes heterogeneous, like the aggregate it acts on. And this means again that one and the same cause can have manifold effects; the effect is always more composite than the cause. Light is modified by the effects it calls forth by falling on different objects, and thus the different colors arise. This law too follows from the existence of force: different things mean indeed nothing other than things that react in different ways; if therefore one and the same force were not modified in different ways by the different things, then a (reacting) force would have been annihilated, which is impossible. — A third cause of evolution is to be sought in the segregation of the like. As the wind gathers the withered leaves, so in general one and the same force acts uniformly on that which is alike in all respects. Things and persons who are subjected to the same conditions will also come to resemble one another. Hereby is brought about what Darwin calls natural selection, which comprises those beings that are able to fight the struggle of life without succumbing. Kindred beings are thereby brought together, and greater definiteness of form and expression becomes possible. —

Now that the nature and causes of evolution have been demonstrated, the question arises: does evolution continue without interruption to infinity, or does it find its conclusion in a definite lasting condition? Every motion continues until equilibrium is attained, and the greater the resistance is from without, the more quickly is equilibrium attained. When the external resistance is not considerable, the inner motion between the parts can continue, so that the whole finds itself in a moving equilibrium (eqvilib-

rium mobile). But every such moving equilibrium has yet a tendency to go over into absolute equilibrium. The external forces never cease entirely to act, even if their action is comparatively imperceptible. — The solar system may be said to be in moving equilibrium, in that every motion or perturbation is counterbalanced by a motion in the *[140]* opposite direction. The motion of the planets can be regarded as an oscillation between aphelion and perihelion. But from the diminution in the period of revolution of Encke's comet it has, as is well known, been concluded that the celestial space is filled with an ether that hinders the motions of the globes and in the end must be able to stop them; then all the smaller globes will again be gathered into one immense mass. Still more important is it, however, that the sun will one day have radiated all its heat into cosmic space; and since the sun's heat is the source of all motion and all life, this will bring with it a complete rest, an absolute equilibrium. — As regards human life, there will one day come the time when the human mind has worked its way forward to complete harmony with nature. Be this goal ever so infinitely far away, it follows yet from the nature of motion and of life that it is that toward which motion goes; in other words, evolution must end with the bringing about of the highest perfection and felicity. —

This too follows from the fundamental law of the existence of force. Since we cannot think of force in its absolute unity, but only under the form of interaction between different forces, all motion takes place under resistance. That which is moved therefore constantly gives off a part of its motion to that which offers resistance, the medium through which it moves; in the end it must then have lost all its motion.

When equilibrium is attained, evolution passes over into dissolution. Whereas evolution consists in the gathering of matter and dispersion of motion, dissolution consists conversely in the gathering of motion and dispersion of matter. That dissolution sets in follows from the continued action of the external forces. When equilibrium is attained, there is indeed no force left over to meet these external forces with. Therefore we see everywhere, both in the history of human societies and in that of the single organism, both in chemistry, geology and astronomy, that an evolution at its highest point passes over into dissolution.

Have we, then, reached the absolute end here, and will the universe at last congeal *[141]* into an eternal death, become an immense heap of extinguished solar systems? It follows of itself that we cannot find any absolute answer to such a question. We know only the evolution within our part of the universe and do not know whether there are systems of stars everywhere in infinite space, so that new motions might continually arise through their influence. The Infinite we cannot construct. If, on the other hand, we hold to

the fundamental law of the persistence of force, then it is a necessary assumption that motion can never cease. Equilibrium and dissolution can form only the introduction to a new period of evolution. That motion is rhythmical because of the multiplicity of forces is a law that holds also for the universe in its totality. In one period the attractive force has the upper hand, the masses concentrate, and motion is dispersed; in another period the repulsive forces have the upper hand, motion is concentrated, and the masses are dispersed. It means, then, that evolution and dissolution alternate in the infinite. The result of evolution is the conditions that bring about dissolution, and the result of dissolution is the conditions that bring about evolution. Before our world there lies, then, an infinite series of periods of evolution and dissolution, and after the end of our world there will follow a new infinity of such alternating periods. The principle in these is the same, although the particular results will never be the same.

This is the conclusion to which our limited knowledge leads us. Just as little as we can conceive any limit to time and space, just as little can we conceive any limit to the unknowable force that manifests itself in the universe. Itself infinite it must work in the infinite. — Since we do not know the Absolute, we know also no absolute necessity, but only relative necessity, necessity for our thought. Just as little do we know the inner relation between the phenomena and the absolute force that underlies them (the
[142] connection between the phenomenal order and the ontological order). All our fundamental concepts (matter, motion, force) are only symbols of an unknown reality. When, therefore, the charge has been raised that the philosophy of evolution is materialistic, because it traces everything, even the phenomena of life, of the mind and of human society, back to the general laws of matter, motion and force, one overlooks precisely that these fundamental concepts themselves are symbols of the Absolute, which manifests itself in all phenomena, in the so-called material as well as in the mental, and cannot find its complete expression in any single class of phenomena. If one holds this fast, then the strife between spiritualism and materialism loses its significance, and one will see that the philosophy of evolution does not drag the higher down by its explanations, but precisely the reverse, raises the so-called lower. —

Spencer's "First Principles" is one of the most epoch-making works of our century. Nowhere does one find, as here, all ideas, all scientific results worked together into a firm, organic unity. The richness of the inductive foundation, the sharpness and certainty of the deductive grounding and of the psychological analysis, which forms the presupposition of induction as well as of deduction, are equally admirable. Spencer stands, so far, on the standpoint of empiricism, in that he maintains that the highest

point we can reach is the most general phenomenal law that experience teaches us to know. But he does not stop, like Mill and Comte, at empirical universal propositions; he traces the empirical laws back to a single law, the law of the persistence of force, and then seeks to derive this law from the very nature of thought and consciousness. Thereby there comes an inner coherence between the different members of his view. Philosophy as a unitary conception of existence must proceed from an original presupposition, which cannot be sought elsewhere than in the very nature of thought, of knowledge. This presupposition, and the necessity of tracing all other knowledge back to it, no thinker in our time has maintained and carried through with such energy as *[143]* Spencer.

In particular matters there were many preparatory works. In the philosophical respect Spencer is especially influenced by Hamilton. He takes over the latter's doctrine of the relativity of knowledge, but shows that relativity necessarily presupposes an absolute principle, whose manifestation and symbol it is. Likewise he has taken over and carried through Hamilton's doctrine of the principle of causality as grounded in the very nature of our consciousness. The proposition that everything has its cause was, according to empiricism, derived from experience; but Spencer shows that it is only another form of the law of the persistence of force and, like this, has its ground in the innermost nature of our consciousness. He differs from Hamilton in the close connection that he thus establishes from the first between the results of physics and of psychology. Hamilton was a strict spiritualist and had no sense for natural science; for him such a synthesis, whereby a common fundamental law is set up for the world of the mind and of nature, would stand as materialism and atheism, and Mansel has also accused Spencer of having pressed Hamilton's doctrine in this direction by accepting only the negative (critical) part of his philosophy and omitting the positive (moral-religious, or rather: theological). According to Mansel Spencer's doctrine is a combination of pantheism and positivism (Philos. of the cond. p. 39—40). But the truth is that Spencer, by a consistent carrying through of the Hamiltonian principles, has arrived at his peculiar doctrine, which, in spite of the vacillation we have already pointed out in it as regards a decisive point, is yet not an eclectic combination, but a well-cast development of a deeply grounded fundamental thought. One might perhaps compare his relation to Hamilton with Spinoza's to Cartisius.

Besides philosophical preparatory works, the results of natural science also form a necessary foundation for his views. As moments of special importance we emphasize: Laplace's theory of the evolution of the solar system; the doctrine of the mutual transi- *[144]*

tion of the forces of nature into one another, as it is most clearly presented by Joule and Helmholtz; v. Baer's definition of life as a development from the homogeneous to the heterogeneous; Darwin's hypothesis of the origin of species. Yet Spencer had in part himself anticipated several of these results, and in any case his originality consists in the working out and the joining together of all these particulars into a self-contained whole.

In certain respects one could compare Spencer's philosophy of evolution with Hegel's system, whose fundamental thought is the dialectical movement from the immediate through the opposition (reflection) to the Idea. Just as in Spencer evolution begins with a homogeneous state, which on account of its homogeneity is in an unstable equilibrium, whose upsetting leads to articulation and individualization, so according to Hegel immediacy lies open to contradiction, which of necessity dissolves it into reflection, until the rift and the distinction are removed in the Idea (Spencer's "moving equilibrium"). But what in Hegel is an abstract logical process, in which the content of reality is pressed into the forms of the movement of thought, is in Spencer a real natural process, which embraces the real universe in all its particular parts. True, Spencer too traces the idea of evolution back to the nature of consciousness, but this metaphysical grounding forms only the presupposition and does not furnish a compelling form for the real content. Whereas Hegel's method is absolutely deductive, in Spencer induction and deduction support one another, in that the results of induction are deduced from the ultimate presuppositions of all knowledge and consciousness. — Hegel had found the motive for his doctrine in an analysis of the movement of thought, which showed three different stages, of which the one led with logical necessity to the other. In Spencer, on the other hand, it is, as we have seen, an ethical-historical idea that has furnished the motive; this idea was then brought into connection with the idea of life in general, and
[145] thereby the way was paved to a wider conception and deeper grounding, whereby the ethical-historical standpoint became only a member within a larger coherence.

The main opposition between Spencer and Hegel rests nevertheless on this, that the latter meant to give a theory, a development in concepts of the nature of the Absolute, whereas Spencer only gives his view as a hypothesis, which indeed in his conviction is the only tenable one, because it is the only one that agrees at once with the fundamental law of consciousness and with the results of experience, — but which yet cannot teach us anything about the Absolute in itself, since all our knowledge concerns only the relative and the phenomenal. According to Hegel the Absolute develops in everything and comes to itself through the evolution of the world; according to Spencer we dare

not apply the idea of evolution to the Absolute, since every determination in concepts of what lies beyond the phenomena involves us in self-contradiction.

Here we stand once more at the main difficulty in Spencer. When the relative and the phenomenal are recognized as forms of the Unconditioned,[*)] then the knowledge of these forms must also lead to determinations of the essence of the Unconditioned itself. It would be precisely self-contradictory if the determinations that hold for the forms did not have at least a relative validity for the essence itself, which finds its expression in these forms. "One sets the Infinite over against, above, beyond, outside the finite, indeed even puts up an immense partition, so that they should not come too near each other. But they do not lie outside each other at all. The finite is the content of the Infinite. Therefore the Infinite is also not incomprehensible; it can be grasped in its content; only encompassed it cannot be." (Fechner). Evolution cannot therefore be a necessary fundamental idea within the finite without also having validity for the Infinite. As we have already said, that which is for us the highest necessity is perhaps only a relative *[146]* necessity, but yet a real necessity, which we must let stand, and which only fancy can set itself above. The Unconditioned would not deserve its name if its essence were not life and evolution; that is a truth to which the metaphysical investigations in the idealistic systems have led. And the evolution that must be ascribed to the Absolute cannot be an abstract, ideal and timeless one, as in Hegel, the thinker who with greatest energy has maintained the application of the concept of evolution to the Absolute; if one recognizes, with the post-Hegelian philosophy, that time, space and matter cannot be placed outside the Absolute, but that "the concept of nature links the consciousness of the world to the consciousness of God" (Weisse), then its evolution must be seen as real, its perfection not as completedness but as unlimited progress.[*)] Admittedly we lack means for a knowledge of the evolutionary process of the Absolute, and Hegel could only by a speculative illusion think he gave one; but that cannot exempt us from going the way that logical consequence demands, especially since consequence here is of such great importance for the whole view of the world.

We have already seen earlier that Spencer himself does not maintain this distinction, when he ascribes to the Absolute the determinations force and cause, which can yet be derived only from the relative. But he goes still further. Of the three chief religious views, whose untenability he thinks he has demonstrated, he can really be said to stand in decided opposition only to atheism and vulgar theism: he maintains, in opposition

[*)] First Principles. p. 278: "The sphere of knowledge is co-extensive with the phenomenal — co-extensive with all modes of the Unknowable that can affect consciousness."

[*)] Philosophien i Tydskland. p. 216 f. 262 f.

to the first, that the religious consciousness is in the right as regards the central matter, and against the second, that this central matter cannot find its expression in the form of personality, which for him is a finite form.[**)] To that extent he can be called a pantheist,
[147] although he does not like such dogmatic expressions. And it must also be maintained that the Absolute is for him not an impersonal, but a superpersonal; he has seen that the debate between pantheism and theism has demonstrated the falsity of the opposition between the personal and the impersonal, when the subject is the Absolute.[*)]

In his early work Spencer conceived evolution teleologically and saw harmony and happiness as the content of the divine idea that was to be realized through it. Later also he maintains the beneficent results to which evolution must lead; but since his standpoint is now objective and universal, so that human evolution becomes only an episode within the great world-drama (or dramas), there can no longer be any question of such a teleology. Hence people have complained of the dreariness of this view, that Spencer — after having shown us how every process of evolution ends in equilibrium and dissolution, whereupon new processes follow in the infinite, — "leaves us anxious, bent over the brink of the eternal abyss, as with our thought we question the infinite darkness."[**)] If any philosophy, any science can answer the questions that here arise, the answer can only proceed from the insight on which we have laid so much weight in dealing with Spencer, that the relative stands in an inner relation to the Absolute; the value that evolution, its struggles and its results have from the relative, human standpoint cannot be lost in the Absolute. —

From Spencer's "general philosophy" we now go on to his "special philosophy," of which only biology and psychology are available fully worked out. Yet we shall find in his "Essays," in "Social Statics" and in the book "The study of sociology," which appeared while this work was being printed, contributions to his ethical and sociological view. —

[148] Spencer's whole system has in a way its germ in the doctrine of the more recent physiology concerning life as a development from homogeneity to heterogeneity, an articulation and individualization. This doctrine he applied first to the life of human society and next to existence as a whole, and thereby won a deeper and more many-sided determination of the general laws of evolution. These laws must now in turn find their clearest expression in the evolution of living beings. Life consists in a definitely formed combination of heterogeneous changes, both simultaneous and successive, whereby the

[**)] We shall later come to mention that Spencer decidedly sets evolution in opposition to creation, so that the former makes the latter unthinkable.

[*)] Op. cit. p. 161—165; 213—214; 279; 313; 324—325.

[**)] *Caro* in Revue de deux mondes. 15 octbr. 1873 p. 774.

inner relations are brought into correspondence with the outer. Life is in its generality an adjustment of the inner to the outer. On lifeless objects the surroundings make their impression without these impressions having any further consequence; in every living body, on the other hand, a secondary change takes place as a consequence of the impression received, a change whereby the living being becomes able to meet a following change in the external world. Thereby the adjustment to the outer relations takes place; the organism undertakes inner changes in order to be able to meet new relations. Life presupposes, then, an interaction between the inner and the outer. In order that the living being may be able to subsist under the outer relations in their multiplicity and diversity, a system of corresponding inner diversities must be developed. Function, activity is thus the principal moment in the idea of life. Organic function precedes organic structure. Function develops structure; structure, on the other hand, gives function its more definite, distinct form. An example of life without proper organization we have in the so-called rhizopods, which show no separation of parts or organs, but nevertheless eat, sleep and move. They consist of a microscopic mass of slime which constantly changes its form, in that it shoots itself out into fine, irregular fringes, which soon draw back again; these movements serve both for the nourishment of the animal and to bring it forward in the water. Here we have in the most elementary form the adjusting of *[149]* inner relations to outer, in which life consists.

What the living being takes up from the external world it transforms into a form peculiar to it. When the organism has been damaged, it has to a certain degree the capacity to make itself whole again. In lower animals a new limb of the same form as the lost one can at once grow out. Reproduction and the inheritance of determinate qualities show us a similar capacity to shape the parts after a certain pattern. Even inorganic matter has such a capacity. The material atoms have their determinate conditions, under which they come into equilibrium. The more composite the molecule is, the more unstable is its equilibrium. And since now the organic molecules are the most composite of all, the equilibrium here is the most unstable. A slight influence is enough to bring about disturbance. But just as we already find in the crystal a capacity to shape the atoms that are taken up or brought out of equilibrium in a manner agreeing with the structure of the crystallizing aggregate as a whole, so we must assume a similar capacity in the organism. When the leg is torn off a lizard, the germ of a new one at once grows forth, which, after having gone through the same process of development as the earlier one, assumes a similar form. Here the structure of the organism determines the development at the particular point. But this can happen only when the form for every kind

of organism is determined by a peculiarity in its elements (the physiological units), in that these, like the inorganic atoms, have a special structure, according to which they strive to arrange themselves. The force by virtue of which inorganic atoms are heaped up into a crystalline form peculiar to them we call their polarity; by analogy with this one might call the corresponding capacity in the elements of living bodies their "organic polarity."

These elements, the physiological units, are on the one hand different from the
[150] chemical units that compose the organic bodies; for these are about the same in all kinds and thus do not explain the differences between them; — on the other hand from the morphological units or the cells; for in part the cell is not a universal form (the rhizopods, for example, are not cellular), in part the very origin of the cell presupposes precisely that organic polarity. The physiological units are much more composite than the chemical, so that a slight change in their composition will bring with it a change in the form that the whole aggregate assumes. Thereby it becomes possible that the outer influences can serve for the development of organic life. The great plasticity of the physiological units gives the impressions their power, whereas their polarity determines the manner in which these impressions are worked up and shaped, the direction in which they come to act. The lowest organic phenomena are as yet wholly without organization; one can speak in their case of neither form nor type. Their shape changes from one moment to the next, according as the outer conditions bring it with them. An absolute beginning of organic life we cannot point to. The results of chemistry on the one hand and of biology on the other seem to entitle us to the assumption that the organic compounds have gradually developed, and that they have gradually won greater and greater firmness.

If the compensation that the organic body is able to procure for the losses its functions cause went only just up to the amount lost, there would take place no development or adjustment to the external world. But when the function and the loss it causes do not exceed certain limits, the loss is more than made good by what is taken up. Movement and activity are, both for the whole organism and for its individual parts, more favorable to the accumulation of cell-tissue than rest is. It is a well-known fact that the muscles grow by exercise. And since the different functions stand in connection with one another, an increase of the one entails also an increase of the other. Muscular movement thus presupposes the circulation of the blood, and both must therefore be de-
[151] veloped together. But from this it follows also that the adjustment to the external world has its limits, particularly in the full-grown individual, and that much is required for

it to be transmitted to descendants. This takes place only when a new state of equilibrium has been formed on account of the changes. Then the sum of all earlier influences and experiences can gain the upper hand over the individual, isolated influences, and the modification that was at first only a temporary and individual adjustment becomes fixed and hereditary.

By this way the origin of new species must be explained. It is true that it cannot be directly proved that the species have arisen through continued adjustments and the effects of these adjustments on structure (the organic polarity); but we know at any rate so much, that in this manner profound modifications take place, varieties of the same species are formed, which can differ greatly from one another; indeed, one can often not decide whether a certain difference constitutes a difference of species or only denotes a variety. This vagueness in the concept of species shows us that it is only a relative concept.

It follows, moreover, from the foregoing development that the species must be assumed to have arisen in the interaction of living beings with the external world. The assumption that a species should not change by being exposed for millions of years to changed influences would be a denial of the proposition of the persistence of force. All organisms are constantly exposed to astronomical, geological, meteorological and organic influences. Every new capacity, every advance in organization that is acquired, carries with it the possibility of new influences, so that the changes must increase in geometrical progression. But the presupposition is always that the changes are not too great or too sudden. Only such changes develop as do not abolish the general harmony between the influencing forces and the functions of the organism.

Spencer has thus by his own way come to the result that Darwin maintained in his famous work on the "Origin of Species." True, Spencer's biology is later than this work, but he had already earlier, in various treatises (see his "Essays") and in the first edition of *[152]* his Psychology, maintained the hypothesis of evolution, for which reason Darwin also in the preface to his work names him among his predecessors. Yet there is constantly a difference in standpoint between the two investigators. Darwin lays, as is well known, the main weight on the so-called selection of quality, i.e. on the fact that the organic beings which cannot take up the struggle with the external world must perish, and only those beings are preserved and propagate which are strong enough, but especially those which in one way or another have acquired a superiority over the others. This Darwin also calls the natural selection: the strongest lives, the weak go under. Thereby the harmony between life and its conditions is maintained and developed. But according to

Spencer's view Darwin has laid too predominant a weight on this indirect development. He himself ascribes the greatest significance to the direct manner of development: the working of the functions forms the structure, and this continued adjustment gradually passes over into the nature of the living being, in that there is formed a new kind of equilibrium (organic polarity) between the physiological elements. So long as the organism is still imperfect and passive, the selection of quality, the indirect production of equilibrium (indirect eqvilibration), plays, to be sure, the greatest part. But as activity develops, the indirect process passes over into the direct. The selection of quality of course continues to play a great part, but becomes more and more a subordinate factor. When a nervous and muscular system has developed, and with it a capacity to vary actions according to circumstances, then the direct production of equilibrium (direct eqvilibration) becomes the most important. In the civilized races of men finally, the indirect process strikes only those whom the order of society *as yet* is not able to protect.

The relation between the direct and the indirect process may be stated briefly thus:
[153] An external influence will kill the organism if it is too weak, — and in that case the indirect manner of development operates; — if the organism on the other hand is strong enough, it will adjust itself to the impression, and then the direct manner of development operates, in that the adjustment leads to a new state of equilibrium within the organism.

This theory, the theory of evolution, Spencer sets in sharp opposition to the usual view, the theory of creation, according to which every species is created separately after a fixed type. Spencer subjects this latter view to a crushing criticism. In the first place the idea of a creation contains a thought impossible in itself. It posits an absolute beginning, sets up a relation between Nothing and Something, a relation which is not a relation. From the very nature and fundamental law of our thought there follows thus the invalidity of the hypothesis of creation. Those who conceive every species as created separately do so without really thinking, without translating the words into thoughts; they do not in reality believe it, but believe that they believe it; for belief presupposes that one ideally constructs the matter for oneself, but that is here impossible. Next it would follow from this hypothesis that the Creator had adhered to the type laid down, even where it was unsuitable, and where other forms would have fitted better. The members of one and the same class of animals live, after all, under many different conditions. Thus the seal is a mammal, but lives in the water. If one now assumes that it was created for its present abode, then it is meaningless that its limbs have the same fundamental form as those of land mammals, since they are after all supposed to be or-

gans of swimming, whereas it becomes easily explicable if it descends from a mammal that little by little became an aquatic animal in its mode of life. Finally it would follow from the hypothesis of creation that certain species were created to harm others, and that pain and distress were a part of the divine plan. According to the hypothesis of evolution, on the other hand, there is brought about in the course of evolution slowly but surely a higher degree of happiness, in that all evils are only transitory. A greater correspondence must continually be brought about between the living beings and the external world. To be sure, one may ask why all evils, all distress and pain could not have been avoided; but there can no longer be any question of their being inflicted with *[154]* premeditation.

The hypothesis of evolution teaches us just as little as the hypothesis of creation to know the real cause; the strife between them concerns only the manner in which the unknown cause works. We find now in every domain that the anthropomorphic conception of the unknown cause disappears; one gradually ceases to derive the phenomena from the immediate intervention of a divine will, although many who in other domains have given up the belief in such an intervention still maintain it in the question of the origin of species; — and yet it has here no better warrant than elsewhere. — The hypothesis of evolution has emerged at once in many different domains: within astronomy, geology, physiology, politics and philology. Just as according to Laplace the solar system has through a process of evolution conditioned by natural causes attained its present shape, so according to Lyell the causes still working daily have through a series of imperceptible changes produced the present appearance of the surface of the earth. Physiology no longer sees in the germ a ready-made model of the mature organism; one recognizes in politics Coleridge's words that constitutions are not made but grow; and one no longer regards the origin of language as a supernatural act. —

Now there is, to be sure, a standpoint midway between both hypotheses; it is that taken up by *Auguste Comte*[*)] and with him many investigators of natural science, who hold to the factual, that a transition from one species to another has not yet been demonstrated, and who therefore will set up no theory at all of the origin of species. Recently *Charles Robin* has with strong emphasis repeated Comte's objection to such hypotheses.[**)] — Spencer regards this skeptical and waiting attitude as a state of "unstable equi- *[155]*

[*)] Cours de philosophie positive. 2e éd. III p. 390 f.

[**)] Anatomie et physiologie cellulaires. Paris 1873. p. XXIV: "If one leaves aside an anti-scientific intrusion of theological presuppositions in the biological problems, then it is by no means a lack of philosoph- *[155]* ical culture in the investigators of our time that in France diminishes the number of those who adhere to the doctrines of Lamarck and his successors; ... The reason is on the contrary the developed philosophical insight that the validity of a speculative view must be judged by the possibility of a positive control, and

librium." Involuntarily thought must go in the one direction or the other: the origin of species must after all be *either* natural *or* supernatural, a third is not given. And when one in general holds a rational view of the world, it follows of itself which member of this dilemma one must seize. When Comte declares the problem of the origin of species to be the fruit of useless speculation, Spencer in opposition to this declares that "the part of biology which concerns itself with the origin of species is the most important, in relation to which all others are subordinate. For on the decision of biology in this matter rests our conception of human nature in past, present and future, our theories of the human mind and of human society."[*)] —

All morphological and physiological phenomena must now be able to find their explanation according to the hypothesis of evolution. The organic forms can no longer be regarded as types that have hovered before the Creator, or as means he has wished to employ for the good of the individual; they must be regarded as necessary results of the interaction between the individuals and the external world. The mechanical conception thus takes the place of the typical and the teleological. Spencer sets up, in order to
[156] demonstrate the possibility of this conception, a series of detailed, in part extraordinarily acute hypotheses, which we cannot dwell on here. His main thought is, on the basis of comparative anatomy and physiology, to demonstrate a gradual development parallel to the development of the conditions. Even the highest and most composite structures and functions must be explicable by this way. Already the structureless protoplasm possesses, e.g., in a lower degree, the same property that the nerve in the higher animals possesses. The gelatinous mass of a rhizopod and an unfertilized egg show movements which presuppose that an impression has been propagated from one part of the mass to the other; and through the nerveless body of a polyp we see a contraction evoked by the touch of a feeler slowly propagate and spread. By continued function the special organ for this function must then be able to develop.

The degree of life depends on the degree in which the correspondence between the organism and the external world is comprehensive and exact. As a system of inner differences is developed, corresponding to the outer, the organism becomes ever more composite; but the connection between its parts also becomes gradually more intimate. In an organism as developed as the human, a slight impression can produce a multitude

---

the lack of a real proof on this point, in that up to now such a proof has not been given for a single class of beings, any more than for a single kind of cells ... As yet only possibilities have been adduced as proof, on which few naturalists are agreed, and not real facts." — Another of Comte's most famous disciples, *Littré*, takes a more accommodating, yet cautiously waiting, attitude toward the hypothesis of evolution (La science au point de vue philos. p. 539-559).

[*)] The classification of the sciences. p. 40.

of different effects, can evoke muscular movements and contractions and arouse ideas, feelings and resolutions. —

As there cannot be pointed out any definite point where the inorganic passes over into the organic, so we can likewise posit no fixed limit between the physiological and the psychological phenomena. Both classes belong under biology and follow the general laws of life. As geology is a special part of astronomy, and biology of geology, so psychology is in turn a subdivision of general biology. It differs from the sciences on which it rests in that it does not, like physics, consider the external phenomena in and for themselves, or, like physiology, the internal in and for themselves, but investigates the connection and relation between the internal and the external. Objective psychol- *[157]*
ogy studies the functions by which the organism is able to adjust itself to the external events and relations, and the manner in which these functions appear in the actions of individuals. Subjective psychology stands in opposition to all other sciences. It investigates the sense-perceptions themselves, the ideas, the feelings and the expressions of will, which accompany the visible adjustment of the inner relations to the outer, and considers these phenomena of consciousness in their origin and mutual connections. Its object, consciousness itself, and its method, analysis of the self itself, whereby alone one can find the laws of the changes in consciousness, place it in the same relation to all other sciences as the subjective stands in to the objective. Psychology (both as objective and as subjective — for the latter is a presupposition for the former) has therefore a still greater claim to be an independent science than any other whatsoever.

Mind and consciousness are something that has no likeness at all to other things, are something unique in its kind. The substance of the mind is that which persists through all changes in consciousness, and whose modifications all these changes are. Therefore Hume is wrong when he teaches that nothing exists but impressions and ideas. Every single sensation or idea could be absent, but that which connects the sensations and the ideas cannot be thought away; it is that which maintains the unity of the circle of ideas in spite of all attempts to divide it, — the substance of the mind as opposed to all the changing forms it can assume. But we cannot know this substance. Every state of consciousness is a modification of it, but in no state of consciousness is it wholly present. Moreover, all knowledge rests on the opposition between subject and object; but here the same would have to be the subject and object of knowledge, which is impossible. All knowledge rests further on a comparison, but since the mind is sui generis, we have nothing to compare it with.

Psychology can thus no more grasp the nature of the mind in itself than chemistry *[158]*

can grasp the nature of matter in itself. Yet it can give an explanation of the mental phenomena, just as chemistry of the bodily. As chemistry seeks the units, the indissoluble atoms, of which all substances are composed, so psychology seeks the units of consciousness, the ultimate elements, on whose combination the life of consciousness rests. One can form an idea of such a psychological unit (unit of consciousness) by conceiving it in analogy with a strong and sudden impression. In the case of such (a blow, an effect of light or a sound) one cannot in the first moment determine of what kind it is; the nature of the sensation is known only when the impression has a longer duration. Of such shocks or blows every sensation is composed, just as a tone is composed of vibrations of the air, which become perceptible singly only when the rapidity with which they follow one another does not exceed 16 in the second. All differences within the life of consciousness rest on the different manners and degrees of the combination of these psychological units.

The investigation of the material world leads us finally to an objective unit, a material atom; the investigation of the mental world leads us finally to a subjective unit, a mental element. The question now arises how they are related to one another. One will in vain try to reduce the one to the other. We can only think the material by means of the mental. The most elementary material property is resistance, but this we understand only by laying our own feeling and force over into the external things. Only in our own movement, our own energy have we a standard for the external phenomena; we know things only through their reaction on us, but this reaction we apprehend only by means of our own action. Without muscular tension we should not be able to apprehend matter. (Cf. above p. 133). If we therefore had the choice between reducing the
[159] mental elements to the bodily or the bodily to the mental, we should have to choose the latter. It is absurd to trace the known back to the unknown; an intelligible hypothesis we get only when we trace the unknown back to the known and thus regard the objective, material elements as in their essence of the same nature as the subjective elements of our consciousness.[*)] But yet neither can such a hypothesis be carried through. Just as we can apprehend matter only by means of mental determinations, so we can only apprehend mind by means of material determinations. We express the mental phenomena by designations that are taken from the material phenomena. We never get, then, beyond the symbolic. The conditioned form under which the essence reveals itself in the subject can no more than the conditioned form under which it reveals itself in the object be the unconditioned essence itself, which lies at the ground of both. Only so

[*)] This way is taken by *Lotze*. See "Philosophien i Tydskland" p. 300-302.

much do we see, that the same law of evolution that holds within the one series of the forms of manifestation of the Unconditioned also holds within the other.

Every sensation must, as we have seen, be regarded as composed of elementary impressions. But in order that a sensation may form itself, not only must the elementary impressions, the psychological units, be gathered into a unity; this unity becomes a sensation only by being a member in a chain of states of consciousness; only by its relation to other sensations, successive, simultaneous or both together, can the single sensation exist. Here we come to one of the decisive differences between physiology and psychology. Physiology occupies itself with phenomena that proceed simultaneously, whereas the phenomena that psychology investigates form a series. The transition from physiology to psychology takes place through the increasing concentration of the nervous system, whereby the scattered impressions are gathered and brought into connection with each other. Only when a central organ has formed, to which the impressions can be *[160]* conducted, does sensation become possible. Simultaneity then passes over into succession, and it is precisely an uninterrupted series of changes in the common center that constitutes consciousness. This denotes a higher stage of development; for when the impressions grow in number and in composition, the adjustment to them cannot take place when they occur at once; they would then work against and confuse one another. Only when they form a series can this be avoided. Consciousness arises, then, by virtue of the general law of the development of life: the adjustment of the inner to the outer.

The single sensation thus exists only by being compared with the other members in the series of sensations and ideas. When it is brought into closer connection with one or more of these members, there forms itself again a higher unity, and so on to infinity. The mode of composition is the same throughout the whole structure of the mind. The mind does not consist in the mere collection of sense-perceptions and sensations; these must be organized and distinguished in fixed groups, to one of which each new sensation can be referred. On this rests what we call thought and knowledge. In this its development the mind presents the same features that have been shown to hold for development in general. From the obscure sensation of sense, resting on few recurring impressions with little diversity and little combination, such as one finds in the lower forms of animals, which have as yet no definitely formed nerves and nerve centers, we come step by step, as the organization becomes more perfect and the senses more numerous, to greater combinations and further-reaching articulation, or we come here also “from an indefinite and incoherent homogeneity to a definite and coherent heterogeneity.” The external senses (sight, hearing and skin-feeling) stand in these respects

above those that concern the interior of the organism (emotions and visceral feelings); but above all sense-perception stands the understanding in clearness and definiteness.
[161] Thought or understanding is one with the sharply marked articulation of ideas. The development of thought is therefore the development of the relations and combinations of ideas.

This development must take place in the same respects in which the development of life proceeds in general. No living being can subsist except on the condition of a harmony between the organism and its surroundings. The higher and richer life is, the more manifold and the deeper is this harmony. What a difference between the intestinal worm in an organic tissue and a Newton or a Shakespeare, whose thought embraces the world! And yet there is a continuous transition between these extremes. The lowest stage in the series is that at which the living being is entirely homogeneous with the medium in which it lives. A higher stage is reached already in the zoophytes, which contract on contact and thus show a succession of sensation and movement. Gradually the harmony extends in space; immediate contact is no longer required for a movement to occur. When the impression of light is concentrated in the eye, orientation of wider range becomes possible. The carrier pigeon finds its way through the air; the helmsman guides the ship across the ocean; the astronomer explores the space of the universe. So too with regard to time; it is thus, to take a single example, one of the marks of civilization that a longer span of time is taken into account in its calculations. Men plant trees that will benefit only their descendants, erect buildings that are meant to stand for centuries, and in astronomy and geology cast their gaze over immense periods of time. In a similar way the harmony between the mind and nature grows in specialty, in composition and in systematic connection.[*)]

[*)] Spencer here recalls *Leibnitz*. The relation between these thinkers has been stated by *Ribot* in a fitting manner. He finds two main points in common in their doctrines. "First, the idea of continuity or of universal compenetration, which has the effect that all things are joined together, that all things
[162] are causes and effects of one another, and that the manner in which the human mind separates them is arbitrary, although it is necessary. This idea is really one with the idea of progress, and is only another expression of it; for when everything is transformed and assumes other shapes, everything is connected; there is in nature no hiatus, no break in coherence. Only the idea of progress is chiefly dynamic, the idea of continuity on the other hand static. — It is well known that Leibnitz, in order to explain the universe, devised monads, a kind of metaphysical atoms, which possessed all possible degrees from simple antitypy to perfect apperception. According to their nature they constitute lifeless matter or the living being, man, animal or angel. And since nothing in the universe is isolated, the whole universe acts upon every single monad, and the monad therefore expresses the universe, becomes a mirror which in its own way reflects the universe. Now strip this great idea of its metaphysical form, and an indisputable positive truth will appear. Place different beings — a stone, a tree, a dog, a savage, a European, Newton or Shakespeare — in the same medium, and each of them will reflect it in its own way and according to its nature, one very little, another to a high degree. Between the being and its medium there will be what Herbert Spencer calls correspondence, and the degree of life will be measured by the degree

Since all mental activity consists in an adjustment of the inner to the outer, and *[162]* since the outer relations through imperceptible transitions grow in number, complexity and diversity, the transitions among the inner relations must be equally continuous and imperceptible. Therefore the usual psychological classifications can have only superficial validity. Instinct, reason, observation, concept, memory, imagination, will, etc. — these so-called faculties can be nothing but different degrees and forms of the adjustment of the inner relations to the outer. The lowest form of mental life is *reflex movement.* It stands on the border of the purely physical. A simple inner relation is here regulated by a simple outer relation; several reflex movements can go on simulta- *[163]* neously; they therefore do not take place with consciousness. When reflex movement becomes more complex, it passes over into *instinct.* Through the frequent repetition of several psychical states (impressions and the movement that follows upon them) there forms an hereditary tendency to perform these complex functions. The simpler connections form first, being more frequent than the more complex ones. But the more complex instinct becomes, the less certain it is; the functions then gradually lose their automatic character. Several different functions will then under certain conditions have a tendency to come into force; and through the struggle between these tendencies there forms the train of ideas that makes up the content of *memory.* Memory can in turn pass over into instinct, namely when it is sufficiently firm and sure; an example of this is found in every acquired skill. In the same way instinct passes over into what we call *reason,* without any definite boundary being assignable. As Stuart Mill[*)] has shown, the original mode of inference is entirely instinctive. When a phenomenon presents itself, one infers involuntarily that its usual properties and other accompaniments must also be present. It is an inference from one particular to another particular, such as even animals and small children make. From this one passes by degrees to the more complex (inductive and deductive) forms of inference. Rational thinking, like memory, through repetition and practice often goes back to the instinctive. Thus we believe that we see the distance between things immediately, although only through long practice have we learned to combine the various single ideas of which the idea of distance is composed. *[164]*

---

of correspondence, the ideal form of life being perfect correspondence. The man who could reach this summit would completely mirror the reality of the universe; he would be a microcosm adequate to the macrocosm. This idea of correspondence, which is a main point in Spencer's psychology, seems to me a translation into the language of experimental psychology of Leibnitz's words: 'every monad is a mirror reflecting the universe.' " La psychologie Anglaise contemporaine. p. 149-150.

[*)] And, for that matter, already *Leibnitz.* De anima brutorum § 14: Consecutiones empiricæ nobis sunt communes cum brutis, et in eo consistunt, ut sentiens ea qvæ aliqvoties conjuncta fuisse expertum est, rursus conjunctum iri exspectet. — But Leibnitz does not carry his lex continui through here, since this empirical inference is to be absolutely (toto coelo) different from the inference of reason (consecutio rationalis), which rests on an insight into the necessity of the relation.

Will also arises through the growing complexity of reflex movements. The difference between a voluntary and an involuntary movement consists in this, that the former only occurs after it has been represented in consciousness. Because of the complexity of the mental states the action cannot be completed at once; a partial execution precedes the full execution, so that consciousness gets time to occupy itself with it and to weigh the possibilities. The cessation of automatic action and the origin of will coincide. — The will is free only in the sense that the action proceeds from the individual's own state of consciousness. On the other hand the usual doctrine of the freedom of the will is meaningless, because it presupposes that one has a faculty of action which can govern the preceding state of consciousness. But this depends on the earlier experiences that the individual has either made himself or has inherited in his constitution. If there were such an incalculable factor as the free will is according to the usual conception, then psychology would be impossible as a science, but the whole great evolution that we can trace through the world of nature and of mind would be fruitless. This evolution goes in the direction of harmony between the inner and the outer. Life must become higher and felicity greater, because the inner relations are determined by the outer and adjust themselves to them. But if the inner relations were in part determined by another factor, the harmony could be disturbed at any moment and progress hindered. —

What has thus been set forth by the way of *synthesis*, — the growth of mental life out of the most inconspicuous germs through continuous transitions, and in such a way that it consists throughout of the same elements, only at different stages of development and in different combinations, — shall now be tried by the way of *analysis*. Having seen the course of development from the simplest elements to the highest complexity, we
[165] now begin conversely with the highest forms of thought and seek to reduce them in such a way that one and the same element proves to lie at the ground of them all.

As the highest form of thinking Spencer regards the *quantitative* or mathematical. It treats the most complex relations and yet with perfect exactness. It presupposes homogeneity in its objects and investigates only the relation between their magnitudes. At the ground of all mathematical investigations and proofs lies the axiom that two things or relations that are equal to one and the same third are equal to one another. This axiom must be known by intuition, by an act of thought that cannot be reduced to any simpler form. On such an act of thought rest, each for itself, the successive transformations of an equation. We posit the equality here for no other reason than that we are immediately conscious of it. — When the quantitative relations do not admit of any exact determination, we stand at the transition *to qualitative thinking*, which concerns the connection

between things and properties. It is not mere magnitudes that are investigated here; rather it is sought what general determinations hold for certain phenomena, or how certain general determinations find their application in the particular cases. The form of qualitative thinking is the inference, which differs from the mathematical proportion only by the lack of exact determinations of magnitude ; the hitherto unknown fact that one posits by means of an inference corresponds entirely to the unknown fourth term in a proportion. Both inductive and deductive inference rest in the end on a comparison between relations, and in the primitive form of inference (aboriginal reasoning), which lies at the ground of both, the inference from one particular to another particular, we have an immediate reference of one phenomenon to another phenomenon. The act of thought that lies at the ground is thus here too an intuition, an immediate conception of likeness.[*)]

All thinking, both quantitative and qualitative, thus rests on *classification*, the re- *[166]*
ferring of related phenomena to the same group. Every recognition is a classification, indeed even the very *conception* (*perception*) of an object is one. One cannot see a thing without referring it to a certain kind. There lies in immediate intuition itself an inference: this thing looks thus (e.g. it is red and round, hangs on a tree of a certain kind, etc.), — consequently it is such a thing (an apple). Inference is an indirect, perception a direct establishment of a relation between two things. — Perception or conception itself is obtained by interaction between the thing and the knowing subject. All the properties of the thing can be traced back to the different positions in which the subject and the thing stand to one another. But these positions we in turn grasp only by means of the movement of our own limbs and their mutual relations. By comparing these movements the intuitions of space and *of time* arise. All impressions are felt as successive. When two or more impressions can only follow one another in a certain order, we have the intuition of time; if on the other hand it is possible to reverse this order, we get the idea of coexistence, out of which the intuition of space develops. The latter is thus, no more than the intuition of time, a form of intuition ready-made from the start, but presupposes the conception of coexistence, which in turn has the conception of succession as its presupposition. — It is always, then, a conception of succession and change, a *[167]*

[*)] In his doctrine of inference Spencer differs from Mill especially in that he sharply distinguishes be- *[166]*
tween logic and the psychological doctrine of the process of inference. The former is a science of universal objective relations, "the conditions under which we can assume connections in time and space", whereas the latter describes the subjective process by which we know those necessary connections. Logic is thus a statics, whereas the psychological doctrine of thinking is a dynamics. From this it follows that Spencer does not, like Mill, move in a nominalist direction, just as he in general takes a higher standpoint than Mill's empirical-subjective one. See "Principles of psychology" 2d ed. II. p. 87-98. The classification of sciences p. 12.

conception of difference and likeness between states of consciousness, that lies at the ground as the element common to all forms of consciousness, from the lowest to the highest.

The basic law of mental development is one with the law of the association of ideas. The primitive and the most essential association is that between every single sensation and the kind or class of preceding sensations which it resembles and to which it is therefore referred. This association takes place entirely automatically. It is not an arbitrary act of thought, which may occur or not; but it is one with the recognition of a sensation we have formerly had, and, as already shown, a sensation cannot at all arise in the mind except in so far as it is brought into connection with its predecessors of like nature. Only when the determination goes into the specific does a deliberation take place, and thereby we pass beyond the automatic.

All thinking, from the most abstract and complex inference to the most elementary intuition, consists in positing relations of likeness and unlikeness. Of these the conception of unlikeness (difference, change, transition) is in turn the underlying one. For the conception of likeness presupposes the conception of unlikeness. When something is seen to be like something else, we have three states of consciousness, of which the third would coincide with the first if the second (the transition itself) did not lie between. These three states can be expressed thus: a, x, a, (the three states of the relation of unlikeness, on the other hand, by a, x, b). But then there is a relation of unlikeness between a and x, a relation of unlikeness that cannot be described otherwise than as a change in consciousness. The analysis cannot be carried further. —

Having seen how Spencer by the way of synthesis and of analysis develops the laws and elements of mental life, we naturally come to raise the question how he stands
[168] toward the two main philosophical directions and their attempts to solve the problem of the nature of knowledge.

Spencer takes a critical attitude toward both directions. The one regards, either, with Leibnitz, the inner relations as created from the start in harmony with the outer, or, with Kant, as subjective forms of intuition and of thought, in which we receive and by which we grasp all impressions. But in the first case evolution becomes meaningless, since the harmony is present from the start. The foregoing investigations have on the contrary shown us harmony as the result of an evolution, by which the inner relations are adjusted to the outer and thereby ever assume higher forms. And when Kant assumes original forms of intuition and of thought, he commits the same error on which the whole imperfection of the older psychology rests, namely to regard only the

consciousness of the fully developed and civilized man, instead of following the life of consciousness back to its primitive forms. Then it would, as we have seen, appear that space and time are not original forms, but that they, like all other intuitions and concepts, spring from the consciousness of difference and likeness. This consciousness thus remains as the sole original form, for intuition, understanding and reason alike. When Kant further assumes the forms of knowledge to be merely subjective, so that the thing in itself is either formless or has forms that do not affect us at all, then consciousness is really not determined at all by things, but develops purely from within, and Kant's doctrine thus leads us back to Leibnitz's pre-established harmony. Both sin against the law of evolution, which permits no separation of the inner from the outer, but according to which thought grows in its interaction with things.

So far empiricism is right. All knowledge derives from experience. The outer relations produce the inner. This is seen from the most common facts : Experience makes wise; habit is second nature; coherence and agreement among the impressions produce firm connections between the ideas. But the hypothesis of experience in its usual form is *[169]* no less untenable than the hypotheses of Leibnitz and Kant. If the mind, as Locke taught, were a blank tablet, whence then should the faculty of organizing experiences come, and whence should the differences of degree in this faculty among different species of organisms and among different individuals within the same species come? Why could a cat then not be turned into a dog by education? And why was a nervous system necessary at all? Leibnitz and Kant are right that without an original organization the faculty of ordering and working up impressions and of performing corresponding actions cannot be explained. Experiences form only the material which the individual works up. Still more clearly does this show itself in the feelings. Feelings and passions manifest themselves before so extensive an experience has been had that their development can find its explanation in it. Not to speak of the manifold passions that already manifest themselves in the child, the mightiest of all passions, the passion of love, precedes absolutely all experience.

Spencer combats pure empiricism, as Stuart Mill especially has consistently developed it. He maintains in particular that experience cannot ground itself, but presupposes a criterion, a principle which stands above experience, a principle by virtue of which every step in the development of knowledge is taken, and without which nothing can be done.[*)] This last, abstract criterion is: the impossibility of the opposite. What we cannot, despite every possible effort, combine in our thought, we must reject. Every

[*)] See above p. 14; 34.

belief or assumption is the result of a test of strength between the different combinations of ideas, a systematic struggle which serves to show which ideas are inseparably combined. What we cannot think apart *must* belong together. And by these neces-
[170] sary connections of thought we then judge everything else. — The fixed and universal relations between things must in the course of evolution form fixed and universal connections in the organism; through the infinite repetition of absolute outer uniformities there are engendered absolute inner connections, necessary forms of knowledge. In the course of evolution there may of course arise false connections of thought, which are only the product of a limited and one-sided interaction with things; but these connections, which for a time may seem inseparable, are dissolved in the further progress of evolution. That does not shake the principle: there *are* inseparable connections of thought. But it is another question *which* they are. — The inseparable connections of thought express the net result of all experience down to the present time, perhaps of the experience of millions of generations, and thereby acquire a value that far surpasses the value of a demonstration resting only on individual experience.

The result is that all knowledge and all forms of consciousness derive from experience, but not from individual experience. Each single individual does not begin absolutely afresh, but receives as an inheritance from his forefathers an accumulated and fixed experience, which has guided the organization of the race in a certain direction and toward certain forms. There is an a priori, but only for the individual; what is a priori for the individual is a posteriori for the race. In the course of the race's evolution the outer relations so act upon it that the general forms under which things present themselves obtain a corresponding expression in the inner organization, especially in the nervous system. Definite nervous connections are formed, which are potentially present before birth, which precede and are independent of all individual experiences, and which automatically manifest themselves already in the first acts of knowledge.

As for the actual point in dispute between the two philosophical schools, Spencer sides with the idealistic direction, in that he denies that consciousness is passive, and
[171] that knowledge can be explained out of the individual's experience. In order that experience may become knowledge, it must be formed and organized, and there is thus presupposed an organizing force and forms in which the organization proceeds. This agrees precisely with Kant's doctrine. Spencer departs from Kant here only in reducing all forms of intuition and of thought to one original function, the conception of difference and likeness.

But Spencer does not stop at the form under which the problem has hitherto al-

ways been treated. He carries the investigation further by asking whence the mental organization derives. This question had earlier not been drawn into the debate. The discussion was closed once the necessity of such an original organization had been shown as a presupposition of all experience and knowledge. By showing this presupposition one had determined the most essential mark of man. In the same way one stopped in botany and zoology when one had shown the essential marks of a certain species, and did not ask about the origin of this species itself and of its marks. But just as Darwin has brought this question forward within natural science, so Spencer (independently of and before Darwin) has brought it forward within philosophy. The law of evolution, which is grounded in the nature of our consciousness, and which experience in every domain confirms, must find its application here too. The higher forms of consciousness have developed out of the lower; the very life of consciousness has developed out of the lower forms of life; and in the course of this evolution, which consists in the adjustment of the inner to the outer, the outer universal relations have impressed their forms upon the inner relations. Spencer can therefore declare himself an adherent of empiricism, if by experience one understands the experience of the whole race.

To this it must nevertheless be remarked that Spencer's own criticism of empiricism applies just as well when the question concerns the experience of the race as when it concerns the experience of the individual. A real necessary and universal can be reached at no point whatever, when experience is taken in the sense of empiricism. If *[172]* there does not lie at the ground, also as regards the race as a whole, an appropriating and organizing activity, it cannot be explained how the forms and functions that form in the course of evolution could become elements of our nature. If one says: a priori for the individual, one must also say: a priori for the race, for what is in question here is a fundamental relation following from the nature of the thing, not an accident that could stand in one way for the individual, and in another for the race. "The race" is moreover only a relative determination; it can in turn be conceived as an individual in relation to a more inclusive race, and so on to infinity.

That Spencer has not clearly seen that what is at stake here is a question of principle has its ground in his standpoint on the border of empiricism. And yet it lay close for him to notice it. He certainly still stands on the ground of "Association psychology"; but the associations of ideas no longer stand with him as mechanical connections, but appear as forms and results of the fundamental mental activity. Mechanical psychology is here as it were melted. Activity and passivity merge into one, in that every single sensation becomes possible only through that fundamental activity. But herewith the

principle is given: without inner activity no appropriation of the outer. This leads us straight to the process on which, according to Spencer, the evolution of life rests, the adjustment of the inner to the outer. It is the inner that adjusts itself; hence it must be conceived as active, and the outer then supplies the aim and manner for the unfolding of the activity. But the inner always retains priority, however far back we go.

What is now in the last instance this inner, which all knowledge and experience presuppose, and which is thus a principle beyond which we cannot go? It can, according to Spencer's own doctrine, be nothing other than the Absolute, the mysterious power
[173] that reveals itself in all things. Only through it are life and consciousness possible. It is therefore also the last source of truth, the last guarantee of the validity of the functions of knowledge. The highest necessity to which thought leads us is only an expression of our highest mental power, and every power is again only a form of the absolute power. The Absolute is thus, as among the post-Hegelian philosophers Weisse especially has maintained,[*)] the last ground of the certainty of thought. Spencer has himself expressed this conviction when he regards the progressing thinker as an organ of the absolute cause and derives his belief from this source (see above p. 131). One sees how the deficiency in Spencer, pointed out earlier, in the conception of the Unconditioned in its relation to the phenomena, becomes of far-reaching significance also in the treatment of the special problems.

Apart from what is deficient in the treatment, it must be acknowledged as a great merit that Spencer has initiated a consideration of the problem of knowledge from this new side. Just as surely as man is a relative and finite being, the question must necessarily also be asked about the origin of the determinations of his being. Only a mystical and hyperidealistic view can reject this question. The Absolute and that which is valid in itself is not shaken thereby; for the conception we can have of it can after all only be relative, cannot itself be absolute; and it is only about the origin of this peculiar relative mode of conception that the question is raised.

Spencer's doctrine of the origin of the forms of knowledge from the inherited results of the race's experience is a hypothesis, just like Darwin's doctrine of the origin of species as a whole. This must be firmly held. His criticism of empiricism, on the other hand, is no hypothesis, but the result of a rational psychological analysis. By that hypothesis he himself believes that he belongs to empiricism; by his criticism he has on the other hand in principle gone beyond it. —

[174] There is a great class of psychological phenomena which Spencer has treated only

[*)] Philosophien i Tydskland. p. 187—89.

very briefly; these are the feelings, which, as already remarked, are perhaps the most difficult subject within psychology. Spencer gives here only a sketch (Princ. of psychol. II. p. 508 ff.), with the special aim of showing the psychological foundation for ethics and sociology. Here as on all points the idea of evolution is the ruling one.

At the lowest stage the feelings are immediately tied to sensory sensations; but gradually they move away from this point of attachment and assume a more ideal character. This development moves through a series of stages. Freedom and mobility become greater; the original automatic sensations, the moods that immediately force themselves upon one, give way to a receptivity for new and more comprehensive points of view. But above all evolution leads to the sympathetic feelings gaining the upper hand over the egoistic. The struggle for existence made primitive man (the aboriginal man) a robber. He had, in order to survive in face of his many enemies, to be equipped with savage instincts. A developed sympathy would not only have been impossible, but also ruinous to him. But indirectly this savage life already paves the way for sympathy. If egoism is necessary for the preservation of the individual, then sympathy is necessary for the preservation of the species, especially among weaker beings; therefore we see herbivorous animals in particular live in company. The constant companionship with kindred beings, common fear and common joy nourish sympathy and gradually make it a lasting element in the nature of individuals. Besides the relation between beings of the same species, the relation between the two sexes and between parents and children now also works in the same direction. The causes pointed out here lead from the dominion of the egoistic feelings to a higher stage, where the ego-altruistic[*)] feelings rule.

Sympathy does not, namely, at once displace egoism; on the contrary, it itself first *[175]* works to develop and maintain new forms of egoism. Sympathy is called forth by life together with others. But this union calls forth precisely a stronger and sharper opposition to those who stand outside this life together. This shows itself in the relation of one nation, one religion, one estate to the others. — Within society too egoism works in close connection with sympathy. For the individual gets the motives for his acting from the authority which society exercises over him. Fear of the chieftain's power and of the wrath of the tribal gods brings the individual to do what counts as duty, which is what in the tribe's history has proved to be useful and necessary. To such actions praise and reward are attached, to their omission punishment. Hero worship thus becomes a necessary stage in evolution, an expression of a close fusion of egoistic and altruistic feelings. Even if the reward or punishment that is expected is at first assumed to come in

[*)] The expression altruism Spencer has borrowed from Comte to denote the opposite of egoism.

another world, the motives are nevertheless worldly, though the worldliness is what has aptly been called "other-worldliness." Actions are not regarded according to their inner nature, apart from nearer or more remote regard to the acting self. The ego-altruistic feelings thus mark a period of transition. At the present stage of evolution they are the only ones that can guide the conduct of men. The inner, according to the general law of life, always adjusts itself to the outer and cannot subsist in any other way. Every age, every state of society therefore develops the feelings and ideas that suit its conditions. This is seen especially in the religious ideas. These are necessarily anthropomorphic, and the human forms that are transferred to the divine are naturally precisely those that at a given time and place rule in consciousness, because they are called forth by the interaction of inner and outer relations.

[176]

We are still in the period of transition from savagery and barbarism to real social life. We often indeed think that barbarism lies far behind us, and that our period is that of civilization; but all earlier ages have thought the same, and there was scarcely any barbarism in the past that does not in one form or another still exist. The life of robbers and warriors, which formerly ruled, nourished especially the egoistic feelings, whereas industrial life, especially through the division of labor, awakens and nourishes the feeling of belonging together and of community. The great and savage crimes therefore become rarer. Sympathy prevents the direct infliction of evil; the pain of others is felt more strongly than before, — though not so strongly that it is not often brought about by roundabout ways. Human nature still has elements in it that derive from the savagery of primitive man. This is seen, among other places, in children. Their egoism, their inclination to appropriate everything, their mistreatment of lower beings are traits that suited the state of the savage, but which must disappear as humane social life develops. The immoral rests, like evil in general, on a discord between life and its conditions; the evils, moral as well as physical, which we suffer are signs that our nature has only imperfectly adjusted itself to the conditions.

Man's original conditions brought it about that he had to sacrifice the welfare of others for his own; his present conditions demand more and more that he shall have only such wishes whose satisfaction does not hinder the welfare of others. Therefore the egoistic feelings are gradually pushed back, and the altruistic develop. Fear, ambition and striving for approval are no longer sufficient motives; the moral sense has now developed in such a way that regard for the welfare of others becomes the predominant one. But altruism always presupposes egoism, in that the altruistic feelings consist in sympathetic awakenings of the egoistic feelings. Sympathy in itself is therefore not

sufficient as a principle of morality. Adam Smith precisely overlooked that sympathy always presupposes that one has oneself experienced that for which one has compassion *[177]* with another. Pity, e.g., presupposes that one has oneself felt pain. One of the most complex altruistic feelings is the feeling of justice. It consists in a sympathetic awakening of the drive to assert one's own rights. Whoever does not himself know and strive after personal freedom cannot and will not recognize that of others; hence is explained the tyranny of servile natures. And on the other side an absolute altruism, even if it were possible, would presuppose that there were always some who were egoistic enough to take advantage of the self-surrender of others and the resulting self-annihilation. — Evolution must move toward a state where everyone works for the welfare and right of others as for his own. The ego-altruistic feelings correspond to the transitory states in society, the altruistic to the abiding ones, because they specify the necessary conditions of social life.

Psychological development itself thus leads us to the ethical principle. This principle cannot be isolated from the principle of life in general. Morality is transcendental physiology. The course of life, the adjustment of the inner to the outer, leads humanity from barbarism to moral social life, and the moral law is the law that would hold in the perfect society. Therefore it is no proof against an ethical system that it does not agree with reality; it would on the contrary be a proof against it if it agreed with reality, since the law for the ideal state cannot be fulfilled under the imperfect states, in the transition from animality and barbarism to humanity. But even if the ethical ideal cannot be realized under the given conditions, it is nevertheless of great importance to know and hold fast to it, so that evolution may proceed in the direction of it and not away from it. It was therefore a great error when thinkers formerly sought the foundation of the moral principle in a state of nature that preceded social life. Such a state is precisely in complete opposition to the ethical principle. To find this one must not look backward, *[178]* but forward. Absolute ethics follows from the basic laws of life, from the conditions of the highest development of human nature. (Absolute morality = conformity to the laws of complete life).

But on the other hand we must nevertheless constantly take account of the actual state and character of humanity, of all the imperfections in the present conditions, which hinder the realization of absolute ethics. We must proceed not only a priori and deductively, but also a posteriori and inductively.[*)] The principle of utility then supplements here the ideal moral principle. Advancing civilization necessarily rests on a series of

[*)] Essays II. p. 210-211.

compromises between old and new, between the ideal and the practical. In our striving to do what is just fitting for the present time, thought must nevertheless always be directed toward what is best viewed abstractly. The principle of utility is a necessary supplement, though not the highest principle.

It is not the knowledge of the useful that calls forth the moral feelings, but conversely the moral feelings that make the knowledge of the useful possible. The principle of utility therefore always presupposes the deeper motives that spring from the nature of the race, in which the individual has a share. Utilitarianism, like empiricism in general, sets the individual as an isolated being of understanding outside the race, the evolving race, and therefore cannot grasp what is original in the nature of the individual. To learn that sympathy is beneficial one must first act sympathetically. Only by realizing this do we discover the true motive, which lets the action be performed for its own sake, whereas the utility theory lets the end fall outside the action.

The utility theory moreover leaves undecided what utility or happiness really is. Happiness must indeed be regarded as a divine idea that is to be realized. But it can
[179] consist only in the exercise and development of our faculties. It is our duty to develop our faculties, and we have a right to the freedom by which this development alone becomes possible. The utility theory thus here too points back to a more comprehensive view, to the general idea of evolution.[*)]

Not only in utilitarianism, but in Comte too Spencer finds an overvaluation of knowledge at the expense of feeling. In opposition to Comte's doctrine (in his "Philosophie positive"), that "Ideas govern the world," that "the whole social mechanism rests in the end on opinions," Spencer teaches that the world is governed by the feelings, for which the ideas serve only as guides, and that the social mechanism almost exclusively has the characters as its foundation. "Men's drives are in the main inherited, but their convictions are in the main self-acquired and depend on the surrounding conditions." "In reality it depends on the character of the people and the state of society which ideas are to spread. The chief cause of social progress is therefore the change in the nature of men which is brought about by the constant discipline of social life, bringing it more and more into agreement with social relations." According to Comte it is "intellectual anar-

[*)] Stuart Mill relates (Moral p. 82) that Spencer has informed him that he does not wish to be regarded as an opponent of the utility theory, although he has combated it both in his "Social Statics" and in his Psychology. The utility theory is indeed also, as the foregoing exposition shows, a *part* of Spencer's ethical doctrine; but according to Bentham and Mill it was to be the *whole* of morality. Besides in this question of principle there is also this difference between Spencer and the Utilitarians, that the latter proceed purely empirically, whereas Spencer connects ethics, like sociology, with the general laws of life and thereby gains the possibility of a deductive method within ethics. This is connected with his systematic tendency and comprehensive outlook.

chy," according to Spencer the moral oppositions, that bring about the political crises of our time.[**)]

This conception springs from Spencer's psychological basic view. We have seen that he especially maintains the originality of the feelings, because they, even less than the *[180]* forms of knowledge, can be the fruit of the single individual's experience and labor. It is therefore especially through the feelings that the individual is affected by the earlier experiences of the race, and the qualities and traits of character that develop through them are too strong to be changed by arbitrary measures and influences. Spencer draws from this important sociological consequences. In his opinion one overvalues the effects that external reforms, especially in education and instruction, can have. Above all it is a matter of changing the basic qualities, the elements of characters — but these are changed only through the practical struggle and interaction with the conditions of life. The development of society is a natural process, whose results one cannot hasten in an artificial way. It is an illusion, which the Radicals share with the Conservatives, that legislation is omnipotent. The laws must indeed emerge from human nature and can thus not be exalted above the intellectual and moral imperfections from which this still suffers. Nor can education be reformed so long as the parents are still so far behind. "All superstition dies slowly, and we fear that this belief in the omnipotence of government will form no exception."

"A scientific study of sociology leads to a clearer judgment of the different political and religious parties. The conception which social science grounds and develops is at once radical and conservative — radical in a degree that surpasses all that ordinary radicalism grasps, and conservative in a degree that surpasses the ideas of present-day conservatism. When one has appropriated the truth that societies are products of evolution, which at different times and in different places assume different forms in structure and function, — then arises the conviction that what to our thoughts and feelings stands as extremely bad institutions yet suited certain conditions that made better institutions impossible; and from this there springs a tolerant interpretation of the tyrannies of the *[181]* past, at which even the most zealous Tory of our day would be scandalized. On the other hand there springs from the observation of how the processes that have brought things to their present state always go on: not with a decreasing rapidity, which might indicate that they were approaching their conclusion, but with an increasing rapidity, which indicates long duration and immense transformations, — there springs from this observation the conviction that the distant future holds in its bosom forms of social life

[**)]The classification of the sciences. p. 37-38.

that are higher than we can conceive; and this belief goes far beyond what the Radical believes, who strives after a change that can be compared with organizations that already exist. And while this conception of society leads us to see that immense changes can be brought about in the slow course of things, so it also leads us to see that within short periods only slight changes are possible." "*)

One sees that Spencer does not, like Mill, step down into the arena to take part in the struggles of the time, but keeps to a purely theoretical and scientific standpoint. His striving aims precisely at freeing sociology from all subjective and party points of view, something that naturally, as he himself acknowledges, is possible only approximately, since the investigator is himself a member of the society whose conditions of life and course of development, whose natural history he investigates.**) That this striving of his after scientific objectivity and his skepticism toward proposals of reform has not its ground in lack of insight into the defects of our present social conditions is seen not
[182] only from what has just been cited, but also from utterances such as these: "Ethically viewed there has never been any other justification for the submission of the many to the few except that it promoted the welfare of the many. — Just as the old theory of political government has been transformed so that the ruler, instead of being the nation's proprietor, is regarded as its servant, so the old theory of industrial and social government will undergo a change that will make the ruling classes feel that their interests are only subordinate in relation to the interests of the masses whose labors they direct."*)

According to Spencer ethics has an absolute and ideal character. It is therefore ignorant of evil and its consequences. The ethical law, which is one with the law of evolution, itself leads precisely beyond evil. Progress is a necessity; civilization proceeds as a natural process. Imperfection means nothing other than a discord with the conditions, which consists either in one's having faculties that neither suit the conditions nor can find application under them, or in one's lacking the faculties that are required in order to subsist. But from the general law of life, that the inner adjusts itself to the outer and thereby develops itself, it follows that the superfluous faculties die away for lack of exercise, and that the necessary powers gradually develop. The realization of the ideal is therefore logically certain. Evil withers away, the good lives.**) One must only let reality

*)The study of sociology. London 1874. p. 399-400.

**)As an inductive foundation for "Principles of Sociology" Spencer, in association with several collaborators, has begun to publish a "descriptive sociology," a tabular survey of the different civilized societies, their forms and their development, which is to facilitate a comparative study of the sociological phenomena. — The work cited above, "The study of sociology," presents the general task of sociology and the subjective and objective difficulties of its treatment.

*)Ibid. p. 256.

**)Already Condorcet and I. G. Fichte have expressed this thought of "the evanescence of evil."

rule, let it exercise its education and cut away the weak and the corrupt.

The transition period from animality to humanity must necessarily be unhappy, for unhappiness is the necessary consequence of a discord between the inner organization and the outer conditions. These sufferings must be endured, although they can of course be mitigated by the activity of philanthropy. Attempts artificially to withdraw men from the consequences of the circumstances serve only to protract the matter and *[183]* at the same time to deprive them of the gain the sufferings were to bring: education and development.*) It is only shortsightedness and softness that, over the momentary evils, forget the great, universal end. Even in the greatest pain and distress we descry a struggling love, a power that works toward health, goodness and happiness. Everyone must work along according to his faculties in the conviction that nothing is lost; even a purely momentary mood of nobility and benevolence adds an atom to the ideal edifice on which work is being done. —

Since Spencer's more special treatment of ethics and sociology is not yet available, we shall not examine more closely or criticize the general features of his practical philosophy, which have now been brought forward. It is clear that his position toward empiricism in the practical domain corresponds to that which he takes toward it in the theoretical respect. The ethical law is maintained in its ideality, but is seen at the same time as the highest natural law, the highest form of the general law of life. Hereby the ideal gets the firm and real grounding which idealism has so often let it lack. It is the principle of evolution and the law that holds for the working of this principle that also unite the ideal and the real. And the conception of the ethical ideal becomes possible only through the infinitizing power which consciousness possesses, but which empiricism wholly subordinates to passive receptivity. — Here too it shows itself, then, that Spencer's view closes itself only in a consistent manner, if we are right in what in the present exposition and critique has repeatedly been emphasized, that the ideal element *[184]* in it is the predominant one, is the principle that rules and works in the empirical reality. —

Conclusion.

*)"If, instead of allowing men to come into contact with the real conditions of their position, we place them under artificial conditions, under false circumstances, they will adjust themselves to these, and will then in the end have to make a new adjustment to the real relations." Social Statics. p. 387. Cf. Spencer's work "Education, intellectual, moral and physical." p. 113 ff.

The road we have traveled has led us to a definite goal. Empiricism, with its conception of consciousness as passively receptive and with its dissolution of the unity of mind into atoms, which only through the laws of the association of ideas got a certain, though accidental connection, — this doctrine, which was an inheritance from the 18th century, we have seen develop through its own consistency and through debate with the critical and idealistic philosophy to a point where not only the active unity of consciousness and of mind is recognized, but where inner necessity takes the place of outer accident.

The atoms into which the life of consciousness dissolved for the empirical "Association-psychology" were the single sensations or rather elements of sensation. But it proved that no single sensation was possible without an elementary mental activity that grasped its difference from other sensations and in one way or another combined it with them. The last factor to which the analysis led was thus this very ideal activity, on which the unity and coherence of the mind rest; it lies at the ground of all sensation and experience, which only through it are possible.

English philosophy has thus in its own peculiar way worked its way forward to the great fundamental thought which Descartes, Leibnitz, Kant and Hegel have developed, and which modern natural science has so strikingly and grandly confirmed, that the idea of subjectivity is the last to which we come, and that in it the principle of the objective
[185] must be sought. But it has hitherto been the defect and one-sidedness of continental philosophy that it has developed the idea of subjectivity predominantly in an a priori and dogmatic manner. Thereby one cut oneself off not only from the a posteriori verification, without which no scientific truth can be maintained, but one also came to conceive the ideal principle itself abstractly and isolated from real reality. This came clearly to light at the turning point which occurred with Hegel's system, the grand attempt at an absolute idealism, a presentation of the Idea in its absolute being in and for itself (theologically expressed: of God as he was before the creation of the world).

The strength of English philosophy lies in its sharp and sure eye for the conditions, which has indeed often veiled the view of the Unconditioned, but which in return has made a more real and concrete conception possible. It has seen that when evolution does not take place in an ideal world of ether, but in the world of reality and of relativity, then a decisive weight, a principled accent, must be laid on the single conditions and circumstances. The mind develops only through the content it receives. Only through a long struggle, a laborious process of development, does the received content become a part of the nature of the mind.

The law of evolution thus shows us the Unconditioned in its unity with the conditions, the inner in its necessary relation to the outer. Its most definite and pregnant expression the idea of evolution finds in the law of life, as Spencer has formulated it: the inner adjusts itself to the outer and develops itself through this adjustment. The validity of the ideal principle shows itself precisely through its dependence or apparent disappearance.

Only through the idea of evolution does English philosophy gain coherence and completion. We have sought to show what contradictions arose, especially in Stuart Mill, when this idea was not taken as the ground. The single real moment, or in the domain of psychology the single sensation, remains, when it is conceived in isolation, dead and ful; in order to have real validity and reality it must be seen as a member of the *[186]* whole coherence; but a member of the coherence it becomes only through a process, and the law holding for this process thus becomes the last ground of explanation to which we can come. By this law are reconciled the determinations that, taken immediately and in isolation, conflict with one another. Thus the laws of the association of ideas conflict, when they are conceived as mechanical and accidental, with the unity and energy of consciousness; but this conflict is removed when one sees them as laws of the development of the life of consciousness, as expressions of the conditions by which the unity is developed and enriched and the energy assumes higher forms.

It follows of itself that in most of the English philosophers, even in Spencer, who has precisely made evolution his fundamental idea and, supported by it, combats pure empiricism, we must find traces and after-effects of the empirical-mechanical mode of conception that forms the starting point of English philosophy in our century. This the foregoing exposition has repeatedly emphasized, and we shall not dwell on it here, where we wish only briefly to bring out the general results we can draw from the exposition and critique now concluded.

English philosophy in our time is in its character akin to the post-Hegelian philosophy in Germany and has essential points of contact with it. In England the movement goes from empiricism and realism back to idealism; in Germany one had speculative idealism as a historical presupposition, but sought now to take a new starting point in experience and in the real given by it, in order by this road to return to the ideal view. In both directions the experimental starting point is thus recognized as essential, although it is recognized that this starting point points back to deeper presuppositions and is itself a member of a larger coherence determined by these presuppositions.[*)] One may

[*)] In view of this the statement in my book "Philosophien i Tydskland efter Hegel" p. 323 must be *[187]* corrected; it hits Mill, but not English philosophy as a whole.

[187] say that idealism has defeated realism, but that just as conversely realism has defeated idealism. From both sides we are pointed back to one and the same fundamental idea.

The method in English philosophy is essentially inductive. The logic of induction is indeed also precisely owed to this philosophy. The same method to which natural science owes its greatness is also recognized more and more as essential for philosophy. Since philosophy, as the general science, is to bring together the results of the special sciences, this can happen only by the same method as is applied within each of these themselves. The last, strict criterion for what is to be recognized as real can be sought only in exact experience. It is Stuart Mill's great merit that he has not only formulated the concrete methods of induction, but also, more penetratingly than any other logician, maintained the necessity of verification. He does not overlook the significance of deduction, but insists that its results must always be tested in experience. What he does not see, on the other hand, is that induction itself presupposes principles and axioms, without which it could build up nothing. What the real is, only experience can teach us; but that through experience we reach the knowledge of the real is grounded in our mental and bodily organization. The inner is here too the principle of the outer; it must indeed in experience adjust itself to the outer, behave receptively toward it; but this it can do only by virtue of its ideal originality; the way in which it appropriates the outer rests on its own previously given nature; and through the adjustment it develops itself. In its method as in its fundamental idea the English philosophy of our time thus leads us beyond empiricism; and in the question of method too it is by the law of evolution that progress is made.

[188] If it stands firm that we have a true knowledge of the real only when we can verify it, i.e. demonstrate its confirmation by facts given in experience, then it is also shown that we cannot gain a real knowledge of the absolute principle. Our development of concepts cannot be verified on this point. Kant's "Kritik eller spekulativen Theologie" stands so far in force even to this day. But when the analysis of the nature of our consciousness and of the results of experience leads us to the presupposition of such an absolute principle (Spencer); when the source of the idea of the Infinite lies in the original activity of our mind (Bain); when the idea of cause is an expression of the fact that we with necessity see an inner unity and coherence as the ground of phenomenal multiplicity and movement (Hamilton); — then this is not shaken by the impossibility of verification. We cannot deduce the factual and the conditioned from the idea of the Unconditioned; but we can develop this idea in such a way that it is seen as the highest presupposition, toward which all knowledge points back, and as the ideal toward which

all development in the world of nature and of mind points forward. —

But it is not only by its main ideas and its method that English philosophy is of great importance, its merit rests not least on the series of detailed investigations it has undertaken in the domain of logic and psychology. Progress in the domain of general ideas is always conditioned by progress in the treatment of the concrete problems. Stuart Mill's formulation of the experimental method, Bain's descriptive psychology, Hamilton's acute theory of the principle of causality, Spencer's psychological and metaphysical analyses are models of scientific investigation. This tendency toward detailed investigations English philosophy also shares with the post-Hegelian philosophy in Germany; we recall only the physiological and psychological investigations of Fechner and Lotze and the investigations in the philosophy of religion of Feuerbach and Weisse. The more one recognizes the significance of induction and verification, the greater weight *[189]* must also, in the nature of the case, be laid on such special investigations.

We stand here at a point where the difference between the schools loses its significance. Through detailed investigations as through the appropriation of the content won by empirical science there forms gradually a common ground for all philosophical inquiry. So far philosophy is on the point of entering what Comte calls the positive stage. That this entrance cannot, however, as Comte thought, take place by giving up the deeper grounding and the comprehensive view, which are reached only by the road of logical and metaphysical analysis, is a truth by whose recognition the English philosophers distinguish themselves from French positivism. But a sharper consciousness of that common ground, a more and more consistent carrying out of the philosophical principles will, as history, and especially the history of philosophy in our time, shows, also lead to greater and greater agreement in the results. Both in the fundamental ideas and in the method we have thus found convergence between the main philosophical tendencies of our time. The schools lose their significance the more, on the one side, the significance of the results of exact experience, on the other side the subjective character of speculative deductions and the impossibility of their verification come to appear to consciousness.

The post-Hegelian philosophy in Germany had as its historical presupposition absolute idealism and could win conditions for further advance only by a break with it. English philosophy, on the other hand, has developed continuously from the last century into this one and has paved its way to new results by following the course it once entered upon while at the same time being influenced by the results of continental philosophy.

Both directions point us, each from its own side, toward the invisible center where truth dwells, which indeed will never be grasped by finite thought, but which nevertheless is the goal toward which it constantly strives, and toward which it moves in infinite
[190] approximation. It has been the intention of the now concluded account of these important tendencies within philosophical inquiry in our time to show that work is also now being done and effort made toward this goal. The emphasis does not lie on the results won at a given time; these constantly point beyond themselves. The law of evolution teaches us, on the contrary, that truth lies in the eternal striving, and it is the calling of science and of philosophy to awaken and nourish this striving, to lead it forward to new tasks and new labors.