LEADING IDEAS
IN THE NINETEENTH CENTURY

BY

HARALD HØFFDING

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[1]

INTRODUCTION.

The task that I have undertaken to solve in this book presents special difficulties. In all fields of science and of practical life there are ideas that, with greater or lesser consciousness, guide the work and characterize its nature and direction. Hence the characterization of the century that ended twenty years ago is also divided among a series of authors, each of whom is a specialist in his own field. What, then, can remain for the one who is to write about leading ideas for the century as a whole? Can ideas be pointed out in which all those special fields of thought meet, or can it be shown that the life of thought, as it has moved in the various fields, presents to a retrospective view a common stamp, so that the characterization of the whole century is given with this common stamp?

My task must be to seek an answer to these questions through a comparison between the ideas that in the course of the century asserted themselves in science, in social life and in religion, the three most important fields in which human thought can test its strength. My earlier studies mean that I do not stand wholly unprepared before this task, and I have not waited for the other authors' accounts, each in his own field. The way I go is that I set up a hypothesis about what is characteristic of the century, and then try to show the justification of this hypothesis partly through an examination of the principal ideas that gather attention about themselves, partly through a comparison between the intellectual work of this century and that of the preceding centuries. It is not given in advance that the lines of thought that can be traced in the various fields, — in the various sciences and in the various practical endeavors, — must point in one and the same direction, so that they can be gathered *[2]* under common formulas. The life of thought of a century cannot without more ado be conceived as running along a single line, whether a curve or a straight line. The subjects that are thought about may be so different that the ideas that are to master them must take shape in highly different ways. In one and the same personality different directions of thought can assert themselves without harmony becoming possible. And directions of thought that seemed to have been displaced once and for all can crop up again under more or less new forms and come into conflict with the new directions into which the striving life of thought has turned. This will happen not least where an age in its joy over its new ideas believes it can conclude for good and all, forgetting Goethe's word of wisdom that there can only be talk of rounding

off, never of conclusion, and overlooking that the rounding off itself will as a rule have an individual character, so that it is not universally valid.

If a common type can be pointed out, more or fewer traits of character that can rightly be said to be peculiar to the nineteenth century, then this presupposes a mutual connection between the directions of thought in the various fields, in any case a certain analogy between them. As already indicated, science, social life and religion will be the most important fields for our investigation.

I shall at once present, in the form of a hypothesis, the general conception of the intellectual peculiarity of the nineteenth century to which my studies have led me.

The boundary between centuries cannot, where the leading ideas are concerned, simply be drawn by the almanac. A characterization of the leading ideas of the 17th century must begin with the last decades of the 16th century, for the germs of these ideas lay in Kepler's and Galileo's first works and in Giordano Bruno's philosophy. A characterization of the leading ideas of the 18th century must begin with Newton's physics and with the ideas that Locke and Leibniz developed in the last decades of the preceding century. And a characterization of the 19th century must begin by pointing to the significant striving that in a series of great spirits — Rousseau, Lessing, Herder, Kant and Goethe — stirs to get beyond the limitation in which the 18th century, with all its greatness, was caught. Since the end of the Middle Ages men had worked on confidently in enthusiasm over the great outlook that the Renaissance had opened. A new intellectual world was built up in opposition to the scholasticism
[3] of the Middle Ages, founded on authority. And the most important, or supposedly most important, results of the new intellectual work were then in the 18th century made accessible to larger circles and constituted the spiritual content of the so-called educated classes. One was proud of what one had attained and looked with contempt or pity upon the ignorance and superstition of earlier times and of the great mass. The circle of men mentioned saw, each in his own way, that there were questions that had not been answered. They asked quite particularly how the new abundance of knowledge and the new critique were to be reconciled with the collected energy, the concentration, which life cannot do without, and which had been so easy to attain as long as instinct and authority ruled and kept all divisedness away. By posing this problem and protesting against the Enlightenment's claim to possess the only true culture they point forward to the new century, and from a very essential side the intellectual work of the latter consists in a continuation and carrying through of their great ideas. A fundamental originality cannot be ascribed to the 19th century, unless

one is willing to count that circle of men as belonging to it.

In the field of natural science too we must go back in time in order to understand the new century. In the midst of the strong movements of the Enlightenment and the Revolution, French inquirers in particular, men such as Lavoisier, Laplace, Bichat, labored to carry through the natural-scientific conception that had been founded in the 16th and 17th centuries. And here too the 19th century stands as a continuation and furtherance, not as founding, however essential a trait natural-scientific work is in its intellectual physiognomy. It is through progressive specialization and, in connection therewith, through confirmation by experience of the fundamental ideas for exact inquiry pronounced at the beginning of modern times, that the natural-scientific inquiry of the 19th century gets its great significance. Ever new regions are drawn under the treatment of thought in order to find new, often more special and often unforeseen applications of the fundamental viewpoints. And the great unfolding of technology, which in the eyes of many is the most characteristic thing about the age, is to be regarded only as a single side of the great work of carrying through and confirmation. Ideas are tested through practical application as well as through experiment and calculation.

The Enlightenment and the Revolution in their way also set tasks for the following century. The principle of freedom was asserted as that which was to be leading in all spiritual, social and political fields. But this principle stood as an ideal demand that *[4]* was first to be applied and carried through in the particular case. And as in the field of science so too in the field of social life it is the greatness of the 19th century that what hitherto had been asserted only as general principles and in limited application was now recognized and in part carried through in reality.

The same trait will be found in what might be called the thoughts of life, that is, the ideas that form men's refuge amid the conflicts of life and in the face of life's riddles, and which are not accessible to strict grounding, since they move on the borders of scientific experience. Here it has in the course of the century been impressed upon us, often with genial energy, that in whatever direction the faith one holds to may go, the mark of its value is nevertheless first and foremost that it has its root in the personality's own soil and own striving. A new religion or confession has not been founded in the 19th century. But in this field too the confirmation by experience that is possible has been demanded, namely personal trustworthiness.

In this connection historical critique must also be emphasized as characteristic of the century. Closely connected with personal trustworthiness is the honest investiga-

tion of the traditions one holds to. It is a counterpart to natural science's striving for confirmation by experience of its ideas and hypotheses. Historical investigations play on the whole so great a role that one can rightly call the 19th century the historical century. —

The hypothesis that I set up is thus that the peculiarity of the 19th century consists in being an age of carrying through and confirmation by experience. It has not forgotten the great ideas that were pronounced three hundred years ago; they lie consciously or unconsciously in the background; but the real work aims at carrying through in the particular case. Through an examination of the special fields of the life of thought, — science, social life and religion, — this characterization is to be confirmed. —

The conception of the 19th century that is pronounced in the hints now given, and which is in this book to be more closely grounded, I have already set forth in a speech that I delivered at the University in my last lecture hour in the 19th century (Dec. 19, 1900), and which was published the following year under the title "Ved Aarhundredskiftet".

[5] In several respects I side with the viewpoints that Eugen Dühring, my older contemporary, had asserted. Above all I must concede him right in his claim of the fundamental significance of the 17th century as far as modern science is concerned. But Dühring was inconsistent in that, though a positivist, he did not ascribe sufficient significance to the confirmation by experience that the great ideas can win; for him, with his feeling for the great beginnings, for the genial creation of the new, carrying through and the demonstration by experience (verification) receded as subordinate. And he becomes unjust to the century whose son he is when he quite predominantly conceives it as a great reactionary period directed against the 18th century. It stands before him in its entirety as a relapse; only in the technical field can he see progress. He overlooks, I believe, that the strict demand itself for confirmation by experience for all ideas leads to critique of all tradition and of all faith in authority and thereby makes possible progress which the mere proclamation of great ideas and outlooks would not have been able to bring. The following presentation will, it is to be hoped, establish this, both in the scientific, the social and the religious field.

A later author, Theodor Merz (History of European Thought in the 19th Century), gives a characterization of the departed century that goes in the same direction as Dühring's and mine. Yet he places its significance especially in the accumulation (accumulating) of knowledge that it has brought about; on the other hand it is said to

stand far behind other centuries in capacity for concentration (condensing) and to be able to measure itself neither with the Periclean age, with the Italian Renaissance, nor with the 17th century. It seems to me that Merz is unjust to the 19th century in characterizing it as accumulating, and in laying the main stress thereon. To heap up is not the same as to seek confirmation by experience. In the most eminent spirits it is precisely interest in the great ideas coming into their own that makes them strive to show that they in every case approximately find confirmation in experience. The work is done — in the very century of realism — in the name of ideas.

I. SCIENCE.

1. ROMANTICISM.

German Romanticism thought it could open the century with a new concept of *[6]* science. It was prepared by German humanism at the end of the 18th century, — by Lessing and Herder, Kant and Goethe, — and is at bottom a translation of the latter's ideas into speculative form. The confidence that something new was about to break through led to the belief that the concept of science too had to be renewed, and this belief found expression in the demand that all science should be grounded on a single principle, a fundamental idea, which was to prove itself in all particular ideas, in all phenomena of nature and in all historical processes of development. The 18th century, it was thought, had hollowed itself out by critique and analysis; now it was a matter of letting the human spirit's need for unity and coherence be fully satisfied. Not as if it were merely intellectual satisfaction that was sought. One was convinced that in the principle that lay at the foundation of all science a key was given to the innermost essence of existence itself. Does not nature's kernel lie in man's heart? — one asked with Goethe. Like Goethe's Faust one was not content merely to work in the particular fields of knowledge, but sought an idea that could disclose what holds the world together in its innermost. And here — it was thought — the difference between thinking, religion and poetry would in the end have to fall away. Only this difference remained, that in religion and poetry the pictorial plays a greater role than in science; but this does not prevent them from being, in their way, just like science, organs of the deep unity that stirs in everything. Not by taking reason captive, as orthodoxy does, nor by confronting, as rationalism does, the religious conceptions

with a prosaic understanding could the highest be reached, but only by seeking back, in enthusiastic devotion, to the source from which thought, faith and art in the end spring.

The word "romantic" was used at the end of the 17th century in England of what made a foreign, strong and lively impression and stood to what moves in clear,
[7] familiar and limited forms as romances stand to daily life. It is used of free, wild nature, of the Alps, of the English gardens as opposed to the strict French art of gardening. From England the word came to France and was established above all through the enthusiasm for wild nature awakened by Rousseau. In Germany it was transferred from external nature to art, to the free movement of the imagination, which nevertheless contains an intimation of a deeper connection than sober everyday understanding and critical science knew. And this word we now rightly use of the new concept of science that was attempted to be asserted in Germany at the beginning of the new century. Just as a romantic region or a romantic poem seems to burst the accustomed frames of apprehension and understanding, yet lets a unity be sensed in the background, so it was the endeavor of the Romantic philosophers to take up the whole rich fullness of existence into their thought and yet to show the origin of this fullness from a single principle. The external division between existence's various regions was to fall away, and one idea to shine through everything. Both manifoldness and unity were to come into their own quite differently from how it had happened in the past.

The history of the Romantic systems is not to be presented anew here, nor criticized again. What interests us here is that these directions of thought sprang from a need for immersion in nature and in history, for getting beyond the external opposition between thought and its subjects. Through full devotion a fuller understanding was to be reached. It is to that extent a craving for reality that here expresses itself; things were to come into their full rights by becoming content of thought, not merely objects of thought. When, despite the often obscure and abstract form that the Romantic systematizers give their presentations, one works one's way into their train of thought, one sees that it was really their earnest purpose to let the subjects be fully satisfied, but that they were at the same time convinced that this could only be done by converting them into determinations of thought. For only of that which one has completely converted into one's own thoughts can one be really convinced. This intimate mutual interpenetration was the ideal of Romanticism. Applied to religion, the consequence is that one can only be convinced of the existence of God when he does not stand

as a thing, an object, a subject-matter, but as that which works in all our thinking and acting. — This view Fichte developed in one of the last years of the 18th century. (Zweite Einleitung in die Wissenschaftslehre. 1797). In a very energetic way Fichte later (Grundzüge des gegenwärtigen Zeitalters. 1805) expressed himself about the *[8]* opposition in which he and his fellows felt themselves to stand to the train of thought of the 18th century. The "present age" is, namely, the 18th century, in so far as its train of thought, in spite of the almanac, still ruled. Fichte reproaches it with having detached itself not merely from faith in authority, but also from the whole involuntary, instinctive foundation of life, that in which the germs of a high and noble life are found. It is the age of empty freedom. One trusts in the concepts one has once formed for oneself, sees in them the sum of all wisdom, while one looks with contempt upon earlier times as sheer darkness. Yet it is not merely in the field of thinking that the fault lies; it goes back to the whole character. The fundamental fault is an egoistic individualism, which has arisen from one's having lost all interest in and all sense for what has eternal and universal value, the age has, Fichte thinks, made it the highest that has value only as an intermediate stage, namely liberation from external authority. In this train of thought in Fichte there appears an idea that we shall often meet in what follows. Enlightenment and freedom he regards as conditions for a higher development of the spiritual life, in particular for thorough science and for ideal development of character. Science is for Fichte not the highest. On the basis of scientific knowledge there ought to develop an instinct of reason, an immediate need and capacity to live in the Eternal and Universal. He looks forward to a time when men through the labor of will and thought are able to let such a life rule in them. He hopes for a new religious breakthrough. As the Reformers brought the renewal that their time needed, "so too in our time, when it has got beyond the many kinds of errors by which it has been tossed about, enthusiastic men will arise who will satisfy this need."

Schelling felt that Fichte's train of thought needed a supplement. For in Fichte there was talk merely of human thinking and acting, not of nature, which really stood only as something subordinate. But we must find again in nature the same forces, the same need for unity, that shows itself in our thinking and acting. And the different forces of nature and forms of nature can then only be different manifestations of a unity, the same unity that makes itself known in the spirit of man. Schelling interprets nature from spirit. "Since the ground of all activity is a single one, which is omnipresent and not conditioned by any other ground, the different natural activities *[9]*

can only be different with respect to form, and none of these forms can be understood from any of the other forms, since each in its kind is the same as the other. Not in this, that one phenomenon is dependent on another, but in this, that all phenomena spring from a common ground, does the unity of nature consist." (Methode der akademischen Studium. 1803). — Here the "new" concept of science stands clearly forth. For the concept of science that was founded in the 17th century aimed precisely at finding the causal relation among the particular phenomena themselves, at ordering them in series, within which the place of every phenomenon is determined according to a law. Now, on the other hand, — in Romanticism — it is asserted to be true science to derive all phenomena from a single principle. Schelling in his presumption even rejects the science of the preceding age as a great misunderstanding. Boyle and Newton have — he says — corrupted physics. He rejects entirely the mechanical conception of nature, which seeks to trace all material changes back to motions in space. But the conception of nature that he wished to put in its place became really an interpretation from above downward; nature was to be understood from man. The "deduction" that Schelling wished to carry out became in reality a symbolizing; he also declares straight out that nature, as we know it from experience, is a symbol, and that the particular things are copies of ideas that appear in another form in the human spirit. This leads rather to poetry than to philosophy. The Romantic urge for knowledge could now once and for all find an outlet only in that way. Characteristic is Schelling's reference to Goethe's Faust (which at that time existed only in its first form, as a fragment): "To the inner strife that springs from unsatisfied craving for knowledge of things the poet has pointed in the poem peculiar to the Germans and has thereby opened an eternally fresh source of enthusiasm, which would in and by itself be sufficient to rejuvenate the science of our time and spread the spirit of a new life over it. Whoever wishes to penetrate into the sanctuary of nature, let him draw nourishment from these tones from higher regions and imbibe in his youth the power that, as in dense rays of lightning, goes forth from this poem and sets the innermost of the world in motion." — But for the long journey Faust had to undertake in order to reach fulfillment, Romanticism was too impatient. It demanded the Highest as something immediately present, wanted to behold it in the Omnipresent and could not wait in endurance for what faithful labor could bring to light.

[10] Hegel began as Schelling's collaborator, but later came into sharp opposition to him, because he found his procedure too schematic. It is not enough to proclaim a unity for all oppositions and then schematically to arrange the particular phenomena

as members of the various relations of opposition. It must be shown how the various members lead over to one another with inner necessity, and thereby come to stand as "moments in a higher unity," a more comprehensive whole. Ordinary consciousness, which also lies at the foundation of the special sciences, gives its concepts an external, mechanical independence that is untenable for a deeper view. A concept is determined through its relation to other concepts, and through this reciprocal relation the unity of the world of thought reveals itself. What Hegel called the dialectical method consists in this, that the analysis of the single concept leads over to another concept that cannot be separated from it, and thereby to a higher concept in which both the first concepts are moments. According to Hegel it is existence itself that forces us to think in this way and to give up the external difference between thoughts. "Scientific knowledge," he says (Phänomenologie des Geistes. 1807), "demands that one give oneself up to the life of the object, or, what is the same thing, have the inner necessity before one and pronounce it." The facts on which Hegel relies are partly the lawlike connection in the world generally, which shows that things are not independent of one another, partly in particular the way in which in nature and history contrasts lead over to one another. His "Dialectic" is from an essential side a theory of contrast effects, a doctrine of catastrophes. Through perishing, which is transition to an opposite state, the particular thing or event proves that it is a moment in a larger whole. Truth is not something single, something sundered from other things, but a great totality, in which everything particular enters in order to get its place in a definite connection. And in the law of totality, which conditions the essence, subsistence and working of the particular things, thought finds again its own law.

If it were said to this that modern natural science, which in its first, founding period had set up as its principle to trace all qualities back to quantities and to that extent to make all science mathematics, had thereby already made it possible for thought to find itself again in reality, since the laws of mathematics are the laws of thinking itself, then Hegel would not be satisfied thereby. For, he says, mathematics operates with pure identities; in its equations the differences of things do not come *[11]* into their own, since the qualitative oppositions cannot be derived from them. Only by the dialectical method can both identities and differences come into their own, since the differences take their definite place within the higher unity, the comprehensive totality, whose identity asserts itself in the connection between them. — Hegel here undoubtedly touches a real problem. For it is one thing that the laws of nature can be formulated as equations, another that the special phenomena in their qualitative

peculiarity should be derivable from these equations. Between the mathematical equations and the qualitative changes whose laws they express there is only analogy, not identity. But Hegel did not see that the very totality of thought, the "higher unity," to which his method was to lead, rests on analogy, — namely on the analogy between the connection of concepts in our thought and the factual relations of things in experience. As Schiller has put it: "Leicht bei einander wohnen die Gedanken, doch hart im Raume stossen sich die Sachen." And in order to carry through his method in the particular case Hegel was compelled, through a play with analogies, to construct the series of ever higher unities that makes up his system. In his philosophy of nature the arbitrariness of this play appears still more strongly than in Schelling.

To designate the way in which all things and events, just as well as all thoughts, lead over to one another and thereby prove their connection within a great totality, Hegel often uses the expression "development." But this word is not to be taken in the sense of a factual transition, running in time, from one form to another. The assumption of such a transition, which later came forward in the modern doctrine of evolution, but which in Hegel's time was espoused only by a few, Hegel expressly rejected. "Nature," says he (Encyclopädie der philosophischen Wissenschaften. 1817), "is to be regarded as a system of stages, the one stage necessarily springing from the other and expressing its real truth, — yet not to be understood as if the one stage were produced in a natural way by the other, but in the inner thought, which is the ground of nature. Only thought can have a metamorphosis, for all development is a change in thought ..... It has been an unsuitable notion in older and newer philosophy of nature to regard the transformation and transition from one form or sphere in nature to another as an external, actual production." — Like Schelling and Steffens, and like
[12] Goethe (in Metamorphosen der Pflanzen und der Thiere), Hegel admittedly assumed a logical, systematic transition from a concept of one natural phenomenon to the concept of another natural phenomenon, but not in such a way that the different phenomena themselves were members of a series, running in time, of predecessors and successors. The transitions take place, on the Romantic conception, so to speak in nature's creative imagination, not in the actual nature, given in experience, itself. It would therefore be wrong without more ado to conceive the Romantic conception of nature as a forerunner of modern evolutionism.

In a similar way as it goes in Hegel's philosophy with the concept of development, so it goes also with the concept of religion. The definite, historically formed religious conceptions stood for Hegel as symbolic expressions of ideas to which philosophy by

its own road had come. The difference between religion and philosophy is supposed to be merely this, that what in philosophy appears in the form of the concept, that makes itself felt for religious consciousness in the form of the image; the content is supposed to be the same. In a later section I shall return to this point; here I touch on it merely as a characterization of Hegel's philosophy.

What guided the thinkers of Romanticism was an inward and full-of-character conviction that the innermost essence of existence is akin to what stirs in the human spirit, and therefore must be capable of being grasped by it, since the laws are the same. It was an impatient idealism, which in reaction to the Realism of the 17th century and the critique of the 18th century put forward the demand that the human spirit should immediately — without mechanical laws as intermediary and without considerate analysis as preparation — find again its own essence in the forms of nature and in the events of nature. The differences and oppositions that nature and history presented were to stand as stages, by which the spirit — that is, the human spirit in its unity with the world-spirit — attains full clarity about itself. What for special inquiry and for sound human understanding stands as an obscure background was now to be brought forward in its whole fullness. It was a great ideal, for whose carrying through the age was now thought to have come. To use an image that Hegel himself employs: philosophical idealism thought itself related to special science, to sound human understanding and to religious faith as the open hand is related to the clenched one; what for ordinary consciousness lies folded together as in a wrapping, that is unfolded in philosophy to full consciousness! — In the Romantic philosophy's conception of the state, as it is presented in one of Hegel's most considerable and most significant writings, "Grundlinien der Philosophie des Rechts" (1821), there appears *[13]* at once the craving to immerse oneself in reality, in what factually exists, and the tendency to convert reality into the forms of thought and ideals. To find reason in reality was for Hegel the same as to make reality one with reason. In the preface to the work mentioned Hegel pronounces the much discussed principle that what is rational is also real, and that what is real is also rational. He saw in the state a fruit of a great historical course of development, which with right could be called God's march through the world. It is not the opinions and resolutions of individuals that support the state and determine its laws. It is conversely the value of individuals, as well as their rights and their duties, that rests on their participation in the life of the state and their significance for it. The state endures, but individuals perish, and their self-conceit, their supposed "Besserwissen" means nothing in relation to the eternal

reason that is expressed in the state and its institutions. The state is the true spiritual totality, within which all spiritual life finds its place, as well as all economic life.

By this conception Romanticism came to work as a foundation for a reaction, which cared more that the Real should be recognized as rational than that the Rational should be recognized as that which was to be realized. The Romantic school met here the so-called historical school of law, according to which right has sprung from the life of the people and from its history, is not the work of single individuals, nor sprung from speculation, and which therefore warns against all conscious interference, indeed is apprehensive of any systematization or codification of the involuntarily developed right. To be sure the historical school of law admitted that the historically given right had to be developed further, and Hegel himself admitted that the forms and laws of the state have come to be "not without" (nicht ohne) the knowledge and will of the single individuals. But it was nevertheless in both directions an entirely subordinate, vanishing position that was assigned to the experiences and deliberations of individuals. And in both places one was inclined to wrong the individuals in advance when their conviction came into conflict with the existing order of things. The conservative way of thinking begins in both places by demanding recognition and piety toward the historically developed, but in its practical carrying through comes to end as cult of mere power, of that which has once and for all won the victory. Power sets right as the norm for the exercise of power in the particular
[14] case; but this right of power can inhibit the power of right, that is, prevent new ideas of right from becoming known and recognized.

Romanticism and conservatism thus easily passed over into one another. To be sure the Romantic as a rule began as a free thinker, often with titanic presumption. But his interest in a venerable past, the flexibility of his thought and the capacity of his imagination to see reality in an ideal light had to lead him to live himself into what exists, whose justification his speculation was thought to have proved. All critique, especially in the religious and the social field, now came to stand as an overcome standpoint. —

The Romantic direction in thinking was bound, by the nature of the case, to find assailants from three sides. Philosophical critique had to rise against the demand for conclusion that the systems thought to have satisfied. The greatest and best in the thought of the 18th century was not overcome, even if for a time it was flooded over by the Romantic stream. The sense for problems and the interest in investigating the presuppositions of knowledge held on as an undercurrent throughout the Romantic

period and came by the middle of the century again up into the full light of day. Furthermore the real sciences found themselves by no means sufficiently represented within the higher unity that Romanticism proclaimed, and they too came forward by the middle of the century with ideas and with results that demanded recognition from the side of philosophical reflection. Finally, religious consciousness was unable to rest content with the speculative philosophy of religion, which wanted to hold fast the dogmas of the existing Church, but made this "reality" rational through symbolic interpretation. In so far as religious consciousness seriously held fast the dogmas, it would not have them reinterpreted, and in so far as it went its own road of free development, it would not build its conceptions on dogmas, but on life itself and its experiences.

Before we go more closely into the three directions here indicated, we must bring forward another circle of philosophical ideas, which worked their way forward at the beginning of the new century.

2. POSITIVISM.

The so-called positivist direction in philosophy is no less characteristic of the 19th century than the Romantic direction. Common to both directions is a craving to immerse oneself in the whole fullness of existence, a craving that in both places was felt in marked opposition to the 18th century's critical attitude toward everything *[15]* that lay before it as given and as historically handed down. One did not think that everything was attained by formulating certain abstract principles, but demanded that the content of existence should come into its own through the work of thought.

In time too the two directions appear approximately simultaneously, only in different countries, Romanticism in Germany, positivism in France. It is a frequent misunderstanding that positivism is supposed to be due to a reaction against Romantic philosophy. But both directions appear at the beginning of the century, Saint-Simon simultaneously with Fichte and Schelling, Comte with Hegel, and there is a certain analogy between the appearance of these men in different camps. The misunderstanding arises from the fact that positivism came to assert itself in larger circles especially after the middle of the century, when the Romantic direction had played out its role, while Stuart Mill and Herbert Spencer asserted new viewpoints within the positivist direction.

St. Simon and Comte admired the Middle Ages, like the Romantics. It stood for them as a time when great common ideas in inward faith dominated life and the conception of life in all circles. It was what the St. Simonists called an organic period. In opposition to it the Enlightenment stood as a critical period that essentially had a negative and dissolving significance. What now mattered was, according to the positivist thinkers, to pave the way for a new condition in which life is again lived wholly and fully, without dissolving critique, and in which there is a positive and common foundation for life and conception of life. These are ideas related to those Fichte asserted in "Grundzüge des gegenwärtigen Zeitalters".

The opposition between the two directions comes forward in the question of how a new content is to be won. Romanticism sought world-embracing ideas, which were to be won either through a contemplation full of presentiment, as with Schelling, or, as with Hegel, through a dialectic that at once followed the laws of thought and of existence itself. By both roads one was assured of reaching immersion in that which Goethe's Faust sought, — "that which holds the world together in its innermost." Such roads St. Simon and Comte could not follow. St. Simon (Introduction aux travaux scientifiques du 19. siecle. 1807) pointed to the great work that natural science had done, not least in the last generation, — Laplace's, Lavoisier's and Bichat's works. The viewpoints that lay at the foundation of these works he demanded also applied to the
[16] nature and position of man in the universe; then the foundation would be given for a positive philosophy, through which a new world-view, grounded on experience and common to all, would be possible. What St. Simon hinted at, Comte carried further in the remarkable work he published while he was still St. Simon's disciple (Plan des travaux nécessaires pour réorganiser la société. 1822). A new social system, it is said here, cannot be constructed at once, but must develop successively. The old society rested on a theological foundation, which cannot suffice under the new conditions. Mere enlightenment and critique (which Comte is accustomed to call "metaphysics") has only negative significance. A new foundation can be found only in the positive sciences, that is, those building on facts. There is, Comte maintains, always a close connection between the ordering of society at a given time on the one side, and the development of science and industry on the other side. What Comte here pronounced, he spent his life carrying out.

The word "positive" is used by the positivists especially to designate two things. It designates an opposition to the supposedly dissolving, negative character of the thinking of the 18th century, and it designates at the same time what is factually given,

in opposition to what speculation might think up. Positive philosophy, however, does not build immediately on facts, it builds on the work done by the single, special sciences to show and interpret the facts. The task of philosophers becomes here first to order the sciences in a definite way, thus to give a classification of them. At the foundation of this classification are laid two viewpoints, which prove to lead to the same result. The one viewpoint is taken from the historical development of the sciences. This development presents three stages, — a theological, where the interpretation is found in the intervention of supernatural beings, — a metaphysical, where certain general ideas or forces are presupposed, — and a positive, where each single fact is interpreted according to its relation to other facts. It now proves that the various sciences pass through these stages with different speed, and in the classification those are then placed first that first have reached the positive stage. The other viewpoint is taken from the sciences' mutual relations of dependence. There are some sciences that form necessary presuppositions for other sciences, and in the classification those are then placed first without which the others could not be understood. Both viewpoints lead to forming the following series: Mathematics, Astronomy, Physics, Chemistry, Biology, Sociology. When sociology (the theory of society and cultural history) is placed last, it is partly because it is the newest positive *[17]* science (Comte regards himself as its real founder), partly because it presupposes all the other sciences, since the theory of man and of human society treats the most composite of all phenomena.

Although the following sciences in the series presuppose the preceding, they cannot nevertheless be derived from these. Each single member in the series brings something new, which is not contained in the preceding members. Positivism stresses e.g. very strongly that biology cannot be derived from physics and chemistry. The various sciences, and with them the various fields of experience, stand according to Comte very independently over against one another, and the principles of the one cannot without more ado be transferred and applied to the other. In the 17th century, the first period of modern natural science, a decided tendency asserted itself in the direction of making all science mathematics. That was connected with the application of the deductive method. But a comparison between the various sciences shows that the richer and more special a field of experience is, the less can its problems be solved by the deductive way, but demand inductive methods applied. Biology and sociology assert their independence and displace mathematics from the leading place in science. By this view the way of thinking of the 18th century, which believed it could remold

life according to certain general principles, is corrected.

Also within every single science positivism stresses differences that cannot be reduced. Thus in physics the various forces of nature (heat, light, electricity etc.) stand as independent over against one another. The various branches of physics cannot be reduced to a unity. Within biology the various organic species stand as independent types, which cannot be explained as having arisen from common basic forms. Positivism thus lays great weight on discontinuity and thereby becomes a doctrine of manifoldness, while Romanticism by its tendency to seek a unity in everything became a doctrine of unity. The opposition between the two directions comes forward here from a new side. Comte says of this at the end of his chief work (Cours de Philosophie Positive. 1830—1842): "Instead of blindly attempting to reduce all phenomena to a single series of laws and thereby asserting an unfruitful scientific unity, — a chimera that inhibits thinking, — the human spirit will end by regarding the various classes of phenomena as subject each to its special laws, which nevertheless unavoidably point in the same direction and present certain analogies."

[18] What could be attained by understanding the scientific work and the mutual relations of the various sciences was, according to Comte, the great thing, that the methods and results of science would no longer stand as indifferent specialties, but become determining for men's faith and conduct of life. Also in earlier times the knowledge and understanding that had been won exerted its influence on faith and conduct of life. But this influence was exerted predominantly involuntarily and unconsciously. Now, on the other hand, the time has come when the influence can be exerted with full consciousness. Positive science cannot answer all questions that can arise in men's minds, but the conviction that science is the only road to grounded knowledge will gradually lead to such questions falling away, since one will no longer feel a need to pose them. Quite involuntarily one will cease to demand answers and to pose questions that no longer fit into the whole way of thinking that has become the prevailing one. When one nowadays does not believe in Apollo and Diana, it is not because the real existence of these deities has been scientifically refuted, but because one no longer feels the need that led to holding fast their existence. The decisive thing in such cases is the influence of scientific work on the whole involuntary spiritual life. By this road there will gradually come a unity and harmony in the spiritual life such as not even the Middle Ages has parallels to,

This conviction, that the final decision of men's faith rests on the disposition that forms itself involuntarily under the influence of the knowledge that can be won, led

Comte, in the struggle that the Catholics in France (especially under Louis Philippe's reign) waged for freedom of teaching in opposition to the state universities' monopoly of giving higher instruction, to place himself decidedly on their side. He wished a direct debate between Catholicism and positivism, without the interference of unclear intermediate forms such as Gallicanism, Protestantism and Deism, and he had no doubt on whose side victory would finally be won.

Comte's own religion was a cult of humanity, "the great being," in which we all have a share, and which comprises all the beings who have worked for progress and happiness. Toward the preservation and perfecting of humanity all thoughts and actions are to be directed.

3. ROMANTICISM AND POSITIVISM IN COMMUNITY AND CONFLICT

[19] In Romanticism and positivism great tasks were set for thought in the first half of the century. In both directions a consciousness asserted itself of the difference between the new century and its predecessors. The common task, which was thought to be solved by highly different roads, was the overcoming of the oppositions with which the former centuries had struggled. A new, "organic" period was to come, in opposition to the "critical" period that had lasted ever since the end of the Middle Ages. The theory of the opposition between organic and critical periods was in general characteristic of the first half of the 19th century. It has its origin in ideas in Rousseau and Lessing, which were carried further by Kant and Fichte. It was now presented most clearly by the St. Simonists, especially by Bazard (Doctrine de St. Simon. 1829). It asserts itself in Hegel, when, after naive security has been replaced by reflection and critique, he demands a higher unity, in which both the preceding stages come into their own, in that a new security, won through purgatory, is gained. Likewise it appears in Comte, when the positive stage is to let both theology and critique (metaphysics) come into their own. Both Romanticism and positivism look forward to a spiritual condition in which inquiry and critique had completed their work in such a way that immediate faith and devotion can again come to rule, though under other forms than before. Yet they did not really think that that time was distant. The essential foundation had been provided. It was only a matter of becoming conscious of what the spiritual development had led to. Here too Goethe could give a motto: The world of spirits is not closed; it is mind and heart that are lacking! It is only a

matter of grasping what already lies near, — of reflecting on what treasure one has come into possession of in the course of the ages.

What was not seen, but what the further course of the century was to prove, was that the opposition between organic and critical periods again and again repeats itself, even if it happens under new presuppositions and in new forms. Every "higher unity" that is really won is itself a foundation on which new oppositions can assert themselves and demand new harmonization. And Comte's "positive stage" gives rise to new problems, since the foundation of experience on which it rests can always
[20] be changed and extended. An "organic" condition can only be a provisional resting position, an equilibrium that can and must be removed if life is not to stand still. The education of humanity is not completed once and for all. That was the lesson that experience was to impress in the course of the century, and that not merely in the scientific field. In face of philosophical systematization it was the task of natural science and the human sciences to bring this instruction. But before we pass on to bring forward their contribution to the characterization of the century, we must first bring forward the memory of a man who at the middle of the century stood as the most esteemed philosophical thinker, and in whose inner life Romanticism and positivism were refracted in a peculiar and instructive way.

John Stuart Mill is an example that it was not easy to overcome an opposition such as that between Romanticism and positivism. In his development, moreover, the after-effects of the thought of the 18th century were refracted against the new directions of the 19th. In his Autobiography, which is one of the most remarkable books of the 19th century, he has described these refractions. He could neither systematize in Hegel's nor in Comte's way, but the motives that lay behind these attempts at system he knew from his own experience, and they both stood in peculiar opposition to the direction in which his energetic father, James Mill, a pronounced representative of the Age of Enlightenment, had wished to lead him. Through a supposedly strictly rational education the young Mill was accustomed to look upon everything in the light of the understanding and to harbor distrust of everything involuntary, of all feeling and imagination. The result was a violent crisis in his youth. Life lost its value for him, and he groped in darkness. He speaks later in a letter of "the petrification which was wrought by a narrow way of thinking, in which one felt quite sure of everything that concerned truth, only that one did not see how many-sided truth is." A Romantic life of mood broke forth and demanded satisfaction — and yet he could not and would not give up what he had learned. And he wished to unite the Romantic conception

with the strict method of positivism, the claims of personal life with honest inquiry, the manifoldness and many-sidedness of life with a walk along the narrow way into which science leads us. In scientific respect his greatest achievement is his Logic (System of Logic ratiocinative and inductive, being a connected view of the principles of evidence and the methods of scientific investigation. 1843). This work, which had for a book of this kind a unique circulation, shows him as the clear and critical thinker. Yet he was anything but a thinking machine, as Carlyle called him. One *[21]* of his close friends, the historian George Grote, said of him: "Yes, he is a logician, but he trembles with emotion right out to the tips of his fingers." For Mill himself this psychological opposition found its solution in the definite conviction that the greatest danger for an inward and free spiritual life lay in the assumption that moral, religious and social truths could be established merely from immediate feeling or intuition. If this assumption were right, it would be impossible to root out prejudices and illusions. No, all knowledge must be built on definite experiences, and all spiritual states, even the most inward and exalted, must be capable of being investigated, as regards their origin, by way of psychological analysis. In his Autobiography he states: "The difference between the two philosophical schools, the philosophy of experience and the intuitive philosophy, has not merely abstract significance; it is rich in practical consequences ... The practical reformer must constantly demand that a change take place in conditions that are supported by mighty and widespread feelings .... and it is often an unavoidable part of his argumentation to show the origin of these mighty feelings." Apart from the interest it had in and by itself for him to investigate the nature, tasks and procedure of human thinking, it was this conviction that led him to write his famous logical work. Far more sharply than Comte he investigated the limits of the possibility of scientific grounding. His work received precisely thereby its limitation; it shows how truths are grounded and confirmed, but not how they are discovered. But within this limitation he presented the scientific methods with such mastery that an astronomer such as Herschel, a chemist such as Liebig, and a physicist such as Helmholtz declared that they had derived great benefit from his work.

The limit of grounding Mill finds in the end in involuntary association, by which an idea that occurs together with another can call up the latter afterwards. There is here, as the last foundation of all thinking, a purely factual connection that only observation can show, — which is a condition of inference, but cannot itself be grounded by logical means. The attempt Mill thus makes to show that at the foundation of all rational

thinking there lies something that is not rational, namely a blind but factual transition between two ideas each independent in itself, forms the complete counterpart to Hegel's attempt to show that every thought with inner necessity leads over to other
[22] thoughts. In this sharp opposition the treatment of the problem of knowledge in the first half of the century ends. While on the Continent, especially in Germany, one was sure that Kant (and Hegel) had solved Hume's problem, Mill's Logic led to this problem's being posed anew. English and German philosophy again stepped up against each other.

4. NATURAL SCIENCE

A Danish philosopher has said that what philosophy was for the aristocratic antiquity, and what theology was for the hierarchical Middle Ages, that physics is for the bourgeois present. This much is also true, that in no age has natural science yet played so great a role for men's life of thought as well as for their practical life as in the 19th century. To what high degree men in general have appropriated a natural-scientific way of thinking is another question. The situation is probably rather that it is particular more or less sensational discoveries or inventions that lay claim to interest. It is the new that awakens wonder and admiration. One forgets that already the old and familiar was wonderful enough. Many fell into an ecstasy of wonder over wireless telegraphy as a great marvel and forgot that already the electric telegraph had been a riddle for their intelligence. It is the results that impress. The roads, the methods, the presuppositions are accessible to few. It was not otherwise, either, in times when philosophy or theology held the great word. The grounding was then too accessible only to a few; most took only the catchwords or dogmas that they could — or were to — use. The Romantic philosophy and positivism were likewise in their innermost kernel accessible only to philosophers by profession. But the general idealistic fundamental idea, that the innermost ground of existence is akin to what stirs in men's spiritual life, made in a more or less indefinite form an impression on many. And the fundamental idea of positivism, that all conception of the world and of life should be built on experience, became of significance for many who could not enter into Comte's philosophy. Romanticism and positivism denote two spiritual directions, which can be traced also in those who do not know what philosophy is. Within so-called sound human understanding as well as within the special sciences

each for itself this opposition can be traced, especially in so far as it appears as an opposition between a doctrine of unity and a doctrine of manifoldness.

[23] It is, as indicated, especially through technology, which is its offspring, that natural science intervenes in human life. Most people have more interest in inventions than in discoveries, and the most grateful thoughts that are sent to science are called forth by the utility that is experienced. And thousands of people enjoy the inventions without thinking of the spiritual work without which they would not come to be. Yet inventions can become an occasion for natural-scientific thinking to be awakened in larger circles, since already the use of tools and machines makes it necessary that definite rules be followed and definite procedures applied. One thereby gets an impression of a lawlike connection that cannot be broken, and interest can thereby be awakened in pursuing this connection further. Already from the very beginning of modern natural science this influence of practice on theory asserted itself. Thus Galileo emphasizes at the beginning of his "Discorsi" how the collections of instruments and machines that Venice commanded "present to thinkers a great field for research, especially in the fields of mechanics." What can thus become of significance for the greatest spirits also exerts to a certain degree its influence on the many. And on this point the justification of physics's being conceived as characteristic of "the bourgeois present" proves itself especially. It was the burgher class that, already from the Middle Ages on, entered upon the path of industry and was thereby led to take inventions into its service. From strict science, which is only the concern of the few, we come through polytechnic institutions, which give both theory and practice, to technical schools and technological institutes, where intelligent workers are trained in independent understanding and application of the inventions to which science has led. Through practice thought thus clears its way out into life.

Less weight must be laid on popular presentations of the results of natural science, though these too can awaken reflection and make the general viewpoints that rule in science accessible to larger circles. There are many whose whole philosophy consists in what they have been able to appropriate through such presentations. Popular-scientific writings of this kind became especially numerous at the middle of the century, when the hopes that many had cherished of speculative philosophy and theology burst, and when — as we shall see in what follows — natural science at the same time presented a great upswing, especially through the connection that could be shown between the various forces of nature and forms of nature.

[24] It would be wrong to think that natural science as such stands in absolute oppo-

sition to philosophy, because it stands in opposition to the speculative or Romantic spiritual direction, which in many circles ruled in the first part of the century. There was also in the Romantic period a critical and empirical direction in philosophy; for Germany, men such as Fries and Beneke may be mentioned here. This direction was quite able to give natural science what was due to it, and itself made use of natural-scientific viewpoints. And furthermore natural science itself works with presuppositions and viewpoints which it is one of the tasks of philosophy to investigate with regard to their grounding and their origin. In the last part of the century there also arises, as we shall see, a new philosophical movement, which takes up the old problems in a more critical way.

While Romanticism overvalued the unity in world-view that can be scientifically grounded, positivism was inclined to undervalue it. The former wanted by the way of thought to go beyond all possible experience; the latter halted at the difference between the various fields of experience and between the subjects within each single field. Natural science, as it developed in the course of the 19th century, can be said to have led to a limitation of the Romantic viewpoints and to an extension of the positivist. It impresses upon speculation that we have no sure knowledge beyond the limits of experience, and upon positivism that we cannot once and for all establish unshakable limits within experience. It asserts the fullness and manifoldness of existence against the Romantic wallowing in higher unities, and it shows against positivism that by the very way of experience a greater and greater connection can be shown between the various fields and subjects, however independent these may for the time being seem to stand over against one another.

The natural science of the 19th century stood in more continuous connection with the preceding century than the two philosophical directions mentioned above. Here again must especially be emphasized the magnificent period that French natural science had at the end of the 18th century. In general, by the nature of the case, there will not occur such great oscillations in the field of natural science as in that of philosophy. After its foundation had once been laid, it developed step by step. The foundation was, as already mentioned, laid about the year 1600. All later natural science, also that of the 19th century, is carrying through and special application of
[25] Kepler's, Galileo's and Descartes's great ideas. Oscillations may come, especially in the field of hypotheses, and hasty "discoveries" may come; but on the whole there is here a solid foundation for progress in thought, which again and again — especially when the results become striking for ordinary consciousness — intervenes in a mood-

setting and perhaps determining way in men's thoughts about life and existence. Often this influence occurs without being noticed, so that it becomes clear only after a longer time what change has occurred in the general way of thinking. And very often the change that has occurred stands in a purely external relation to the direction in which human mental life otherwise unfolds. Only through energetic work of thought, whether this is exercised involuntarily or with consciousness of aim and means, can harmony be attained between the viewpoints of science and the other longings and strivings of mental life. There will always be problems that natural science by its nature cannot take up, in any case not for the time being. Already in the task that modern natural science has set itself from the first start, a limit is given for its influence on men's faith. This task is that of converting all content of experience into quantitative forms, or, as it has been expressed, "to describe things in all respects with numbers." But if there are experiences, lived experiences, whose value rests on their quality, whatever may be the case with their number or their quantity, then there lie here problems that will constantly set thought in motion, and in whose treatment natural science has only indirect significance. And of that kind are the most important experiences that can be had in the field of spiritual life. To this kind of problems and their appearance in the 19th century we shall return later. Here we shall keep to natural science in itself as one of the greatest testimonies to the power and genius of the human spirit and try to bring forward the leading ideas within it in the 19th century. No single author, especially when he is not himself a natural scientist, will be able to give a presentation of this on his own. On certain points he may perhaps have source studies, but otherwise he must orient himself by means of monographs or by works on the history of natural science.

When the question is of leading ideas in the field of natural science in the 19th century, there is hardly any doubt that there are two ideas that gather interest about themselves, in that they at once denote results and new points of departure, and in that they moreover are not only of the greatest significance for science itself, but also will naturally intervene in a determining way in men's whole conception of *[26]* life. These are the doctrine of the conservation of energy and the hypothesis of the successive origin of species in interaction with the conditions of life. It is with these two ideas that the following presentation will be concerned.

a. *The Conservation of Energy.*

The great ideas that in the preceding centuries had come forward in the field of natural science were applied in the 19th century to a whole series of particular fields, so that they thereby got their progressive confirmation, while at the same time a wholly new and great connection of nature revealed itself.

Chemistry had been made by Lavoisier into an exact (quantitative) science, in that by his weighing experiments he had found confirmation of the old principle, stemming from antiquity, of the conservation of matter in the world under all dissolutions and compositions. A scientific foundation had thus been laid for the idea of the cycle of matter in the world, this thought which in the time of the Renaissance was pronounced by Montaigne and Bruno, and on which Shakespeare's Hamlet makes moving reflections. French and English natural scientists, men such as Saussure and Priestley, carried the idea further through the application of chemistry to the physiology of nutrition. In the new century Dalton's application of the atomic theory to chemistry (1805) brought greater exactness in. The conservation of matter now meant the conservation of parts by weight. The atomic theory, which hitherto had had a qualitative character, now got a quantitative character, in that it was shown that the chemical combinations take place according to the relative weight of the elements.

Chemistry moreover acquired, about the middle of the century, cosmic significance, in that spectral analysis, which investigates the refractions of light of the various substances, made it possible, through investigations of the light of the stars, to discover what substances they consist of, a discovery that — after Newton and Laplace had shown the validity of the law of gravity for the heavenly bodies — gave a new proof that the same laws of nature that hold here on the earth hold in the whole world accessible to us. Even Auguste Comte and Alexander v. Humboldt thought that the heavenly bodies could only be the object of determination of position and gravitational mechanics. Now it was revealed that they also had other properties, which were known from earthly phenomena. The foundation was laid for a developmental history of the stars similar to that of the earth's developmental history on which geology was working.

[27] In physics a connection was shown between forces of nature that had hitherto been regarded as independent of one another. On this point Romanticism was proved right against positivism. It was undoubtedly under the influence of Schellingian ideas that H. C. Ørsted was led to the discovery of the influence of the electric current on the magnetic needle. Thereby the theory of electromagnetism was founded, which in

a brilliant way was carried further by Ampère and Faraday.

Toward the middle of the century a still closer connection between the various forces of nature was shown in the principle of the conservation of energy. The physician Robert Mayer was led by physiological investigations to the thought that there existed an exact relation between motion and heat. (Bemerkungen über die Kräfte der unbelebten Natur. 1842.) When a motion ceases, the energy that has found its expression in it does not become nothing, but is converted into heat in a definite ratio, which Mayer, with the imperfect means that stood at his disposal, sought to determine. And the heat thus produced can in turn (in part) be converted into motion. Mayer was led to his great thought by the conjecture that there must hold in physics a law corresponding to the conservation of matter in chemistry, so that every change was only conversion into another form. Just as little as the single substance in chemical change disappears without replacement, just as little could, he thought, a force of nature cease to act without replacement in the form of another force of nature. Cause and effect must correspond completely to each other. What Mayer, whom Ernst Mach has called "a modern Galilean nature free from all influence of schools," put forward in a brilliant but still indefinite way, was asserted independently of him and by different roads by the Englishman Joule, the Dane Colding and the German Helmholtz, — a testimony that here was a leading idea that lay in the air. And yet all four authors had difficulty in getting their works printed and met on the whole doubt and lack of understanding. This must have seemed to themselves all the more strange, as they were all convinced that the principle they asserted was a principle of reason and as such self-evident. They all proceeded, like Mayer, from the view that there must be an inner relation between cause and effect, as between ground and consequent; as that which is contained in the premises comes again in the conclusion in another form, so they thought that what was contained in the cause had to come again in the effect in another form. The correctness of this line of thought, which without more ado makes the relation between cause and effect into *[28]* one with the relation between ground and consequent, will not be discussed here. But for a historical consideration it is of great interest to see that the discovery of the conservation of energy was a continuation and confirmation by experience of a principle that had already been put forward in the seventeenth century. Descartes put forward a law of the conservation of motion, according to which no motion came to nothing and no motion arose from nothing; there was always the same sum of motion in the universe, only it was distributed in different ways. Leibniz criticized

this doctrine, maintaining that according to it every transition from motion to rest and from rest to motion within the universe would be incomprehensible. There is, he further maintains, no absolute opposition between rest and motion; rest is arrested motion, due to an equilibrium between forces (tendencies), and motion is released anew as soon as the equilibrium is removed. It is thus not motion but its possibility, "force", that is conserved, and while there is not always the same sum of motion in the universe, there is the same quantity of "force" (energy, in the modern expression). Leibniz laid such great weight on this principle that he even called it the foundation of all the laws of nature (fundamentum naturæ legum). In the natural science of the following period, this principle receded for various reasons, although it has again and again been at work as a tacit presupposition. When it now came forward again, it was not as a proposition of pure mechanics, but as a principle asserting a definite ratio of conversion between the various special forces of nature (motion, heat, light, electricity, etc.), and it was now carried through by experimental investigations. It now stands as a law for all material manifestations of force. — Nowhere is it so clear as here that the science of the nineteenth century, in all its greatness, consists after all in carrying through ideas that stem from the remarkable time when modern science was founded.

It has been said of the principle of the conservation of energy that it is only a generalization from a limited experience. It is also true that a confirmation by experience of a principle such as this can in a certain sense never be concluded. One will never be able to isolate and close off a part of the world in such a way that every supply or removal of energy would be absolutely excluded. And there always remains the possibility that the principle holds only for the part or parts of the world that we have so far been able to investigate. And since "the world" can never come to lie before us as a whole concluded once and for all, it is an infinite task that is set
[29] for research here. But the principle of the conservation of energy here only shares the fate of all the propositions to which research into actual nature can lead. The concept "world" in the sense of absolute totality has the scientific significance that it shows us the possibility of ever new tasks as the horizon widens. And it marks a significant progress that the principle put forward in the seventeenth century has now proved accessible to progressive confirmation by experience. Like every great hypothesis, the principle supplies an important maxim for research, namely, always to look for new forms of energy as equivalents for those that disappeared, and to look for the preceding forms of energy from which the new ones have arisen. Maxwell

has particularly emphasized the epistemological significance of the principle of the conservation of energy, that it leads us, at every new natural phenomenon, to put definite questions. This is indeed the significance of all living principles in science, and this significance cannot be overstated.

The principle says that in every material change there is only a conversion of energy, without any energy being lost; but it says nothing about the direction in which the conversions take place, and in particular nothing about whether a conversion in the opposite direction can always as easily take place. A French inquirer had, as early as eighteen years before Mayer's treatise, put forward a principle that throws light on this matter. Sadi Carnot (Réflexions sur la puissance motrice du feu. 1824) showed that, for heat to be a motive force, there must be a difference of temperature. Motion is produced only when such a difference arises between the states of the bodies between which the action is to take place. But since temperature always tends toward equilibrium, heat passing over from warmer to colder bodies and thereby being distributed, the possibility of a new conversion of heat into motion thereby falls away within the same circle of bodies, considered as a closed whole.

Carnot's principle, too, holds only for a limited world. And if by "the world" one understands a limited whole, there prevails in it a process that leads in the direction of a complete equilibrium, a state in which no new release of energy is possible.

Carnot's principle, which, like Mayer's, had to wait long for full recognition, does not conflict with the principle of the conservation of energy. For in the state of equilibrium that there is a constant tendency to bring about, no energy has been lost; only, all energy has passed over from being actual to being potential.

An optimistic philosophy of nature will hold to Mayer's principle, a pessimistic *[30]* one to Carnot's. But both principles hold only for a limited horizon, and since natural science always seeks to widen its horizon, the discussion of which standpoint is the decisive one will always have to be taken up anew. —

A still more intimate connection between the various forces of nature than that which follows from the principle of the conservation of energy was shown when it was established that forces of nature which had so far stood as different in kind follow the same laws and must therefore be assumed to be of the same nature. Thus Melloni and other inquirers showed that light and heat were one. H. C. Ørsted had already divined a connection between light and electricity, conceiving the lightning flash as a series of electric sparks. And after Maxwell had by a mathematical route put forward the electromagnetic theory of light, according to which light can be traced

back to electricity, the laws of these two activities being the same, Hertz showed experimentally that light and electricity, as regards wave motion, velocity, refraction, etc., present the same relations. Optics could now be regarded as an appendix to the theory of electricity.

On the whole, the confirmation by experience that the principle of the conservation of matter and force gained in the nineteenth century is far from having brought the scientific conception of the world to a conclusion. It was in itself a magnificent picture of the world that was unrolled. The world came to stand as a whole within which constant conversions of matter and force took place, without any matter or force at all arising or perishing. As we have already seen, this picture of the world cannot be concluded, since the widening of the horizon can always bring new possibilities. But on another side too, in the very foundation, research goes beyond the picture of the world just indicated. The development of the theory of electricity has led to this: that far down beneath the matters and forces of earlier science a new and rich world comes into view, in which perhaps the real foundation of the world of matter and force in which we move is to be sought. The theory of electricity has led to the discovery of minute particles, so-called electrons, which are smaller than Dalton's atoms and of which these must be thought to be composed. The change in the scientific conception that was thereby heralded at the end of the century is described in the following way by a Danish physicist. "In the last half of the century the theory of electricity has pressed forward so strongly at the expense of the other forces of nature that
[31] it seems about to swallow them all. One is now inclined in advance to refer not only optics but also the other forces of nature to it; electricity alone is so manifold in its forms of manifestation that it can be thought capable of comprising them all. Even the very concept of mass can be dispensed with, if the atoms are thought of as charged with electricity, since in that case every acceleration must produce induction in the surroundings, and thereby in turn a resistance to the motion. The dissolving power of the theory of electricity has extended to chemistry as well, to which physical chemistry bears witness. Even the old concept of the atom is in danger of collapsing. Thus J. J. Thomson and Zeemann have believed they could demonstrate masses a thousand times lighter than the chemists' atoms" (C. Christiansen: "Før og nu", first volume of Tidsskrift for Fysik. 1908).

There thus opens up, at the end of the century, the prospect of an entirely new physics, which goes further back than the one founded by Galilei and Newton and will derive the maxims of the old physics from still deeper-lying principles. From

the world of the great masses one has begun to descend to the world of the small elements. "The time," says an American physicist, "seems not to be distant when there will be room for a new 'Principia' and for a work that will accomplish for the molecular systems what the 'Mécanique Céliste' accomplished for the solar system." (Woodward: The Unity of Physical Science. Congress of Arts and Sciences St. Louis 1904).

If it is asked what it is, then, that moves according to the laws of electricity and under special conditions appears as light, heat, etc., the natural scientist answers with the beautiful name ether. But the ether is known only through its special forms of manifestation, among which electricity is regarded as the fundamental one. The famous French physicist Langevin declares that it is impossible to give a picture, a representation, of the ether, since its properties are entirely different from those of matter and probably far simpler than these. And he thinks that the difficulty we face here perhaps hangs together with the present constitution of human consciousness: for centuries we have been used to thinking by means of the concept of matter, and are therefore unable to form a concrete representation that does not have a material content. The ether can be thought only by means of the concepts of the electromagnetic properties we ascribe to it (Langevin: Congress of Arts and Sciences. 1904).

Plato already saw that a thoroughgoing atomic theory cannot be built up by means *[32]* of the ordinary concept of matter, cannot be grounded in sensuous representations, but must make use of analogy. The result he reached by a critical thinking-through of Democritus's atomic theory, modern physics has now reached by its own route. —

For no science have greater possibilities and tasks shown themselves at the beginning of the twentieth century than for physics. But what has already been won — the progressive carrying through and confirmation of the great ideas that three hundred years ago led to the rise of a "new science" — is a great achievement, which will be of incalculable significance for the human conception of existence, once its scope really dawns on consciousness. Both in the great and in the small, in the world of the heavenly bodies and in that of the imperceptible elements, a greater connection has shown itself than one could have divined.

b. *The Doctrine of Evolution.*

The science of organic life could not remain untouched by the great movement stirring in the physical and chemical domain. Ever since the first rise of modern

natural science, one had sought to bring the doctrine of life under the general laws of nature as physics demonstrates them. The principle that all change is motion, one sought to maintain not only in the domain of inorganic but also in that of organic nature. Descartes insisted emphatically that organisms were only mechanisms, set going according to the general laws of motion, and he held that Harvey's discovery of the circulation of the blood confirmed this view, which became the prevailing one in the seventeenth century. As a reaction against this mechanical view there appeared the so-called vitalism, which maintained that organic phenomena could find their explanation only if one assumed a peculiar life force, independent of all physical and chemical forces. Vitalism reached its most pronounced form in the medical school of Montpellier in the eighteenth century. The "life force" directs the physical and chemical processes in the organism in definite directions, brings about a connection among everything that goes on in the living being, so that it can subsist as a whole, provides for the formation of the substances that life needs, and for sufficient strength to overcome the resistance that life meets from without.

The nineteenth century appears here, as on other points, as a carrying through and specialization of the fundamental ideas of the seventeenth century. Mechanism
[33] and vitalism at bottom designate only two natural tendencies within science. The former seeks to explain the whole from the laws that hold for its parts; the latter regards the parts from the standpoint of the whole and as means for its conservation. When the two tendencies in the history of science rhythmically succeed one another, it is a consequence of the fact that experience must at one time point in the direction of the dependence of the whole upon the parts, at another in the opposite direction. And when the same tendency returns again, it will come in a new form, conditioned by the experiences gained in the interval, and the criticism that has been raised from the opposite side. The rhythm thus does not exclude progress and is by no means to be conceived as an alternation between two bankruptcies.

Already the eminent French natural scientists of the end of the eighteenth century had demonstrated the circulation of matter in the world and with it a constant interaction between inorganic and organic nature, and in the first decade of the new century chemistry began to show that substances which one had hitherto believed could be formed only in organisms could also be produced outside them. But it was only toward the middle of the century that the strictly scientific conception of organic life was maintained emphatically and with full consciousness. In Germany it was Johannes Müller and his disciples (Ludwig, Helmholtz, Dubois Reymond) who

demanded that all individual phenomena of life be explained through the application of physical and chemical laws. Johannes Müller is — like H. C. Ørsted in the physical domain — an example of how Romantic speculation can spur scientific inquiry. For he was a vitalist and inspired by the ideas of Schelling and Hegel; but he proceeded from the assumption that the "life force" must act according to definite laws of nature, such as only physics and chemistry know them, and he applied his brilliant and energetic inquiry to finding these laws. His "Handbuch der Physiologie" (1840) marks a turning point in this respect.

A few years after this work came Robert Mayer's discovery of the energy principle, which he at once applied to the organic phenomena (Die organische Bewegung. 1845). Throughout the whole course of the life process there takes place, he maintains, only a transformation of matter and force, never a creation of them. In France they proceeded more directly, the great experimenters Magendie and Claude Bernard seeking, by means of vivisections, to demonstrate the conditions under which the organic functions take place. For the brilliant inquirer Claude Bernard (Introduction à la Médicine expérimentale. 1865. — Leçons sur les phénomènes de la vie communs *[34]* aux animaux et aux végétaux. 1878) it stood as decided that physiology, whatever subjects it may face, has to do only with physical and chemical elements.

The great inquirers who in the nineteenth century took up again the mechanical (physico-chemical) method in physiology by no means proceeded dogmatically from the assumption that all organic phenomena could ever be explained purely mechanically. They maintained only that the said method was the only one that was scientifically possible, and that all real progress was due to it. They regarded life as a given subject whose connection and conditions are to be investigated. They acknowledged that no exhaustive definition has yet been found of what life is; they do not employ an appeal to the "life force" as an explanation, precisely because one does not know what life really is. Life stands for them as an irrational quantity, toward which we can only take the road of finding more and more decimals without being able to reach any conclusion. When Claude Bernard rejects vitalism, it is because it does not lead to individual investigations, but stops with an appeal to the "life force"; it does not set to work but makes lazy, it is "une doctrine paresseuse", vitalism cannot be the basis of a working hypothesis, except when it is conceived in the way Johannes Müller conceived it; but that is in reality to give it up.

When toward the end of the century vitalistic ideas seem again to assert themselves, this nevertheless does not mean a direct resumption of genuine vitalism. Neo-vitalism

does not hold that an appeal to a "life force" contains any real explanation. It holds that not all organic phenomena have been explained by the physical and chemical route, — that (as Pasteur's investigations of the simplest organisms in particular have established) the origin of life from inorganic matter cannot be demonstrated. What authors such as Bergson (Evolution créatrice. 1907) and Driesch (History and Theory of Vitalism. 1914) under various designations (élan vital, psychoid) put forward as supposedly indispensable fundamental concepts in the organic domain, is rather an expression of wonder at the peculiar nature of organic life, never fully commensurable with physical and chemical processes, than it is concepts that really play a positive role in scientific work. They are thoughts that can be used to ask questions, but that give no answer. —

This whole consideration concerning the science of life might very well have
[35] found its place in the preceding section. For it is above all the law of the conservation of physical energy under all changes that makes the physico-chemical method in physiology possible and necessary, in that for every quantum of energy that seems to disappear in the organism an equivalent must be sought — in or outside the organism, and in that likewise, whenever new energy announces itself in the organism, the question must be asked what equivalent has corresponded to it — in or outside the organism. — If I have chosen to present the biological problem as an introduction to the doctrine of evolution, it is because in both domains it is characteristic of the nineteenth century that it — with all acknowledgment of the peculiarity of life and of the validity of the idea of evolution — nevertheless holds strictly that in both respects definite laws hold, which it is the task of science to find.

When the principle of the conservation of energy was first enunciated and at once applied to organic life, Charles Darwin was already absorbed in the long investigations that led him to put forward his hypothesis of the successive evolution of the species. And in the same year in which Robert Mayer's treatise on "the forces of inorganic nature" appeared, Darwin wrote in all quietness the first draft of his theory. (The Foundation of the Origin of Species. A sketch written in 1842. Edited 1909). Already during his voyage round the world (1831—35) observations and comparisons had laid the foundation of the doctrine of evolution in his mind.

It was no entirely new hypothesis. Inquirers had often pointed out that the species could not subsist independently of one another, and that it was unjustified to ascribe absolute validity to the concept of species. In the seventeenth-century philosophy there is a decided skepticism toward this concept. Bruno and Bacon interpreted

the Platonic ideas, which were originally concepts of species, as laws and could acknowledge them only in this sense. In Spinoza and Leibniz this view emerges still more strongly. Spinoza explains the origin of concepts of species by the fact that we lack the ability to comprehend a larger number of phenomena in a clear and distinct manner, that is, in such a way that the different qualities show themselves to be connected as ground and consequent. Leibniz emphasizes above all that no concept of species can exhaust the manifoldness of nature, and that observation shows us so many transitional forms that no concept of species can have more than provisional validity. Thus both from the demand for knowledge of laws and from the experience of the manifoldness of differences and transitional forms, doubt had been raised about the validity of the concept of species and about the right to stop at the differences *[36]* between the species as original. Within the circle of natural scientists itself the way had to be paved for a conjecture of the successive evolution of the species, the more one made exact comparisons between the different organic forms. Two French natural scientists, Cuvier and Geoffroy St. Hilaire, conducted (about the year 1830) a noble contest here, the first zealously seeking to demonstrate differences of form where one had so far found identity or analogy, the second maintaining that in the whole organic world one and the same mode of composition prevails (unité de composition). The dispute concerned (according to Cuvier's account in "Histoire des Sciences naturelles") in part whether within the vertebrates such a unity of structure can be demonstrated, in part whether it can lead to filling up the gap that was generally assumed between vertebrates and mollusks. The dispute led to the finding of new similarities and new differences and was a dispute about continuity within morphology. Goethe, who followed this dispute with so great an interest that over it he quite forgot the July Revolution, sympathized with Geoffroy St. Hilaire, whose view agreed with Goethe's doctrine of metamorphosis. This whole dispute stood in the domain of anatomy and morphology; but when Cuvier here so strongly stressed discontinuity, he was naturally bound to be in advance an opponent of the idea of a real, historical evolution of the organic forms out of earlier existing forms. Inquirers who occupied themselves essentially with anatomy and morphology and did not enter upon the question of the relation of the forms to the conditions of life, had no sense for the question of the origin of the forms (or they answered it by means of theological or teleological representations). Their view did not become much different from that of the Romantic philosophers, who, as we have seen, by the very word "development" understood only a transition from thought to thought (so to speak in the fantasy of nature), not a

real transition in time from one form of existence to another.

Lamarck took in 1809, in his "Philosophie zoologique", the significant step of maintaining a real process of evolution in the organic world, basing himself precisely on the dependence of the organic forms upon the organic functions and, through them, upon the conditions under which organic beings lead their lives. That such a view did not at first win great adherence was due in part to the fact that sufficient knowledge of the extinct forms of life was still lacking. In geology there prevailed Cuvier's theory of a series of upheavals, "catastrophes", in the history of the earth, a theory that
[37] carried with it the assumption that after each catastrophe a new world of organic species had to be produced, not descended from the perished species. According to this theory one could still hold fast to Linné's principle that we assume just as many different species as God has created, only that one no longer thought of one creation at the beginning of the world, but of a series of creations, each introducing a new period of the earth, — and so that one conceived the last of these creations as one with the creation that the first book of Moses speaks of, the one that underlies our present zoology and botany. Long before, two such different spirits as Jacob Böhme and Ludvig Holberg had by a similar route sought to unite their natural history with their theology.

It then became of decisive importance that Lyell in his "Principles of Geology" maintained that the same forces that now bring about changes on the surface of the earth have also been at work in the past, and that a continuous transition between the different periods of the earth can and must therefore be assumed. "Uniformitarianism" was now maintained in opposition to the theory of catastrophes. Darwin's teacher Henslow had given him Lyell's book to take along on the great voyage, but with the admonition not to believe what stood in it. This admonition was not followed; the book worked together with Darwin's own investigations to lay the foundation of the modern doctrine of evolution. When between the organic species in different periods of the earth there are found both similarities and variations in manifold degrees, and when no sudden upheavals take place that set sharp divisions between the periods of the earth, there is reason to suppose that to the continuity of the forms and conditions there corresponds a historical or real continuity between the different species. It was this thought that Darwin seized and to whose carrying through he set his life's work.

The first time Darwin disclosed his great thought to one of his scientific friends, he added that it was like confessing a murder. (Letter to Hooker. January 1844). This aptly expresses how strange and unreasonable the thought must have stood to the

natural historians of the time, who were occupied with describing and determining species. Eminent natural scientists such as Weismann and Huxley, who later became zealous evolutionists, have described how little foothold the idea of evolution had in the science in which they were initiated in their student years. A doctrine of the origin of organic species by natural evolution was considered fantastic speculation. This state of affairs forms an interesting parallel to the manner in which the idea of the conservation of energy had been received. In both cases it was a matter of *[38]* carrying through, by means of observations and experiments, views that already prevailed in the domain of general ideas. Just as the conservation of "force" was to become the thought of a definite, experimentally demonstrable relation of equivalence between different physical processes, so the "kinship" of the organic forms was to become the thought of the successive evolution of the species under the influence of definitely demonstrable causes. The history of both theories in the nineteenth century serves to throw light on the intellectual character of this century in relation to the preceding centuries. Its significance consists in the patient carrying through of points of view that had already been put forward earlier. Its great discoveries were made in the work of winning confirmation by experience for principles that had long waited for one, and that in this period of waiting perhaps had fallen into oblivion. Under Newton's mighty influence the idea of the conservation of force had "for more than a century disappeared from physics" (Rosenberger: Isaac Newton und die physikalischen Principien. 1895). And Weismann remarks of his student days: "It was as if our teachers had drunk of the waters of Lethe and had completely forgotten that a theory of evolution had ever been discussed."

What was new in Darwin was, first, the comprehensive collection of geological, morphological and zoogeographical and phytogeographical facts on which he relied, and, second, the zeal with which he sought a definite cause, demonstrable in experience (a vera causa), that could explain the origin of new species. Lamarck's assumption of an inner need of development, a need that was to lead the living beings along new paths through the influence of function upon structure, did not satisfy him. Such a need was for him no fact and therefore no scientific cause. He was, as he had already stated in the above-mentioned letter to Hooker, in agreement with Lamarck as to the result, but not as to ways and means. His chief merit is precisely that he posed the problem more strictly than it had been posed before; indeed, he posed it so strictly that he could not even satisfy it himself, much as he believed in the hypothesis he put forward. The cause to which he pointed lay in a fact that already

in the seventeenth and eighteenth centuries had been impressed by English inquirers (Hobbes and Malthus), namely the conflict and struggle between living beings that arises from the need for self-preservation and reproduction, in that need and capacity
[39] are not the same in all, nor the command of external means. In the struggle to subsist and to spread in existence, Darwin holds, those individuals and species have the best prospect of subsisting whose need and capacity fit best the conditions of life as these actually are. Such individuals and species will then form the foundation of the future evolution of life, while those that do not fit the conditions of life will perish. Moreover Darwin assumed, like Lamarck, that characteristics acquired by exercise or external influence will be preserved in the succeeding generations.

Darwin's book on the evolution of species (1859) aroused, besides much indignation, great enthusiasm in many circles. Insufficient heed was paid to the reservations Darwin had made, and the new doctrine was proclaimed as a solution of all riddles. It was even often regarded as an inconsistency that he did not maintain the original origin of life from inorganic matter. It was forgotten that, shortly after the appearance of Darwin's book, Pasteur (1860) had shown that even the lowest organisms known arise from germs and not, as many had believed, from inorganic substances. It was like a dizziness that seized inquirers and laymen alike. The only one who did not become dizzy was Darwin himself. As has rightly been said: "The empty enthusiasm shown by Darwin's followers became so wild that Darwin himself, the most modest of all men, felt quite ashamed of it." — Max Müller, in whose autobiography this statement occurs, compares the Darwinian intoxication with that which some decades before was aroused by Hegelian philosophy, and he mentions yet a third immature enthusiasm in a third domain, namely the enthusiasm over Sanskrit studies, which, in the opinion of many, and for a time of Müller's own as well, solved all problems of the origin of language, thought and religion. — Such times of intoxication are perhaps unavoidable when significant thoughts break through. Critical reflection comes afterward. —

Darwin's lasting merit with respect to the conception of nature is first and foremost that, by the way in which he presented his hypothesis, he stimulated new investigations. He conceived his doctrine as a thread of thought that could connect facts from different domains (geology, paleontology, comparative anatomy and physiology). His doctrine was for him not a dogma, but a means of casting light on nature. And he was clear that it could not be directly proved. He says accordingly in a letter about one of his critics: "He is one of the very few who see that the change of species

cannot be directly proved, and that my doctrine will go under or maintain itself, according as it is able to group and explain the phenomena." The fruitfulness of his *[40]* points of view is also acknowledged even by opponents. The hypothesis of evolution stands, after his energetic appearance, constantly as a background for all scientific biologists, and although Darwin's own explanation of evolution did not suffice, he has yet the merit of having drawn attention to the finding of a cause that itself appears in experience and is not merely speculated out. In the treatment of this problem, after Darwin's time, the experiment more and more takes the place of the merely comparative method, which Darwin was at the outset compelled to employ.

The criticism of the new doctrine came from three sides. — Weismann showed that there was no real evidence from experience for the assumption that acquired characteristics could be inherited. The weight that Darwin, here following Lamarck, laid on this direct form of adaptation to the conditions of life had therefore to fall away. It has not been possible to demonstrate that the functions that the conditions of life require bring about changes in the structure of the organs, which are then inherited by the descendants. Against Herbert Spencer, who grounded a hope of the progress of the race on the heredity of acquired characteristics, Weismann maintained his standpoint in an interesting polemic. — Weismann was led by this rejection of direct adaptation to lay so much the greater weight on the indirect adaptation that takes place in the struggle for existence, in that only those individuals and species subsist whose organs and functions fit the conditions of life (The All-Sufficiency of Natural Selection, a reply to Herbert Spencer. 1893): But Hugo de Vries (Die Mutationstheorie. 1901) showed that, for variations to be able to become of significance in the struggle for existence, they must be so far-reaching that a new species has already come into being by their origin. Small variations (in de Vries's expression "fluctuations") play no role. It is otherwise with large and suddenly appearing variations ("mutations"). And in face of these species-forming variations (whose causes, according to de Vries, have not yet been found) the struggle for existence plays only the role of eliminating the nonviable types; it acts as a sieve. But it does not at all explain how viable and nonviable types arise in the first place. Darwin himself had, moreover, constantly acknowledged that the causes of the small but constant variations on which he relied were unknown. — Finally, long overlooked investigations by Mendel (Versuche über Pflanzenhybriden. 1866. 1870) established that the individual, elementary characteristics appear each by *[41]* itself quite independently in inheritance, that they can occur together in all possible combinations, — and that, once they exist, they persist tenaciously and without

change in the succession of generations. — Nature has thus proved to be both more conservative and more given to leaps than Darwin supposed. The riddles have proved to lie further back, both as regards the heredity of the characteristics and as regards their first origin.

From a more general point of view, where it is not a matter of contending for or against a special hypothesis, it nevertheless stands as significant that Darwin opened our eyes to the manifoldness of variations. It made nature richer in possibilities for him, although in his systematic works it stood as an obstacle to the ordering into delimited species. It points out toward life beyond the limits of the system. There is constantly a tendency in men to stop at hastily formed general concepts, instead of recognizing — and seeking out — the great individual differences within the groups or species we form for the sake of overview. Both in the spiritual and the material domain an eye for the manifoldness of life is of great importance, and Darwin, who by many was regarded as a materialist, has here contributed much to the understanding and appreciation of spiritual life.

And of no less importance is his insistence that even the forms of life most glorious in our eyes must satisfy definite conditions in order to subsist and act. In face of much false idealism his emphasis on the struggle for existence has been a word in season, although this struggle could not play, in the service of his theory, the role that he had intended for it. —

The idea of evolution was not applied merely to the organic domain. Already in the eighteenth century it had been applied in Kant's and Laplace's hypothesis of the origin of solar and stellar systems. Resting on what spectral analysis and telescopic investigations have established, astrophysics too has now set up a doctrine of evolution. The great sidereal evolution presents a series of stages: nebulae, self-luminous stars ("suns", arisen through a condensation brought about by gravitation), dark stars (which perhaps present conditions for organic life). In face of sidereal evolution one stands in most cases as in face of organic evolution: the real cause of the variations is enigmatic.

c. *Popularization.*

[42] It is a magnificent continuation that the natural science of the nineteenth century has given of the work on a comprehensive and internally coherent picture of the world that the preceding centuries had begun. One traces more and more a great connection

between all forces and between all forms, a deep unity in the great manifoldness. Since the great turning point that marks the time from Copernicus to Newton, such a widening of the horizon, both outward and inward, had not taken place. And this new widening took place by virtue of the same principles that lay at the foundation of the science of the two preceding centuries. Of particular significance it became that thought now, through the greater practice and by means of the new instruments, could follow the ways of nature with greater suppleness, both where they lead down into the infinitely small and where they lead up into the infinitely great. And further, a scientific technology has developed that earlier times did not know. Finally there is in scientific circles an increasing clarity as to how great and high the ideal of knowledge is, and that we are always only on the way in the direction of it. There still prevails, to be sure, among a number of natural scientists a certain dogmatism, which expresses itself either in their believing existence to be exhaustively explained by the fundamental concepts with which the science of the material side of existence works, and which are assumed to be the only possible ones, — or else shows itself in the haste with which one calls upon supernatural causes merely because no natural causes could so far be found. But there can — in connection with the role that epistemological points of view, as we shall later see, have played in philosophy toward the end of the century — generally be traced a deeper understanding of the presuppositions and range of knowledge.

Such an understanding one can naturally expect to find only in scientific circles. As already indicated earlier, there are two ways in which science influences wider circles that stand outside the strict scientific work. The one way goes through the practical application of science in the various technical domains, the other way goes through popular presentations of the results of science.

It is probably technology that gives natural science its greatest prestige outwardly. Even those who do not know what method is, and who also cannot assess the significance of the individual discoveries, are seized with great admiration, or at least with *[43]* wonder, at the great inventions. It might be of interest to have the history of wonder written for the nineteenth century. Often fear of the indeterminate and mysterious has been the first effect of a new invention. When the first steamboat appeared on the Seine, French peasants had the church bells rung, because they feared disasters. Wellington and Cavour did not like to travel by railway, and many ordinary people shared this fear. Gradually one has become accustomed to the new things, has taken them as matters of course and has even become somewhat blasé toward new novelties.

These also followed quickly upon one another and gradually changed the course of daily life. The nineteenth century has been called the century of steam, of electricity, or of chemical technology. In a welter of forms there are daily applied all over the world inventions that are due to long and quiet labor in the service of strict science. Matches and dynamite, the telegraph and the telephone, electric light, photographs and gramophones — all such things strike the eye and for many supply the standard of the culture that has been attained. Living at the end of the nineteenth century, many have thought chiefly of the fact that they lived in a time when one traveled by railways or automobiles, read by electric light (not by tallow dips), telephoned (instead of writing letters), etc. But there have also been those for whom all these splendors receded before the thought of the power of mind that has made them possible and in future can take them into its service. And there have also been those who felt that, despite all this external change of life, there was yet, through the inner spiritual life and its eternal tasks, a connection with a past that led its life under other external conditions and had to get by with more imperfect means.

Popular presentations of scientific principles and results easily take on a dogmatic character, in one of two directions mentioned above. Either one rests content with the view that natural science knows only what is extended in space and moves in space, and that within this circle of subjects it demonstrates that no matter and no force arises or perishes except by conversion from or into other kinds of matter and force, and one then believes the riddle of the world solved by this. Or else one follows natural science as far as one is able to obtain tolerably intuitive results and then calls upon either traditional religious representations or spiritistic representations. Doubtless presentations of the first kind, that is, in a decidedly materialistic direction,
[44] have found the widest circulation. A literature of this kind arose especially in the middle of the century, when one had turned away from Romantic philosophy, and when at the same time significant thoughts and results came forward from the side of natural science. One of the most widely distributed writings of this direction was Büchner's "Kraft und Stoff" (1855), of which before the end of the century nineteen editions appeared. He teaches that, just as the steam engine produces motion, so organic compounds of certain substances in the brain produce a sum of effects, which is called spirit or thought when it is gathered into a unity. More drastically Carl Vogt expresses himself (Köhlerglaube und Wissenschaft. 1855) in the utterance that, just as the liver secretes bile and the kidneys urine, so the brain produces thoughts. Yet these authors do not hold to their ideas with full consistency. And the most

considerable man among this circle of authors, the physiologist Moleschott (Der Kreislauf des Lebens. 1857), declares chemistry indeed the highest science, but he is, as especially his interesting autobiography shows, rather a monist in Spinoza's sense than a materialist. Later Häckel popularized the doctrine of evolution in a very bold and drastic manner in his "Welträtzel" (1899).

The philosophical significance of this literature is not great. But through it, scientific representations have been propagated to places where they would otherwise not have reached, and it has been a means of arousing reflection, precisely by its dogmatic character. For materialism is dogmatic in spite of any theology. But perhaps it is the case that with dogmas one must drive out dogmas.

5. THE HUMAN SCIENCES

a. *Psychology.*

Both Romanticism and positivism took a stand in opposition to the individualistic intellectual tendency of the eighteenth century, according to which the single personality stood as independent in its life of thought and feeling, in so far as this was not inhibited and crippled by domineering authorities that had an interest in the persistence of prejudice and superstition. The historical powers were overlooked through which the single individual, without knowing it, may be determined in his innermost being. For the tendencies that came most strongly to expression in the first part of the nineteenth century, the independent individual was only a fancy or an abstraction. Just as one now had a greater understanding of the spiritual life of *[45]* earlier times, so one now saw the single individual as a member of his people, borne by its customs and usages and led by its traditions. This conception could often lead to mysticism, in that the unconscious paths by which the spiritual life of the race determines the personal life of the individual were one-sidedly emphasized at the expense of what more or less conscious self-activity could accomplish on the basis of the individual's own peculiar nature and of the new experiences that he was able to make within his circle. One was inclined to see the best in existence in the mysterious world that lies beyond the domain of clear consciousness, and in order not to be disturbed in one's cult of it one was ill disposed toward all criticism.

Nevertheless the tendencies mentioned, both positivism and Romanticism, meant an enrichment of spiritual life. It was impressed that spiritual life commands a greater fullness than can at any given time be unfolded with full and clear consciousness. It is indeed in every generation the duty of thought to draw up the intellectual account; but there will always be items in this account that cannot be definitely formulated, indeed, there will undoubtedly also be both receipts and expenditures that do not enter into the account at all.

In peculiar contrast to the mystical tendency, which in various forms had the floor in the first third of the century, stood the line of thought followed by the most scientific psychology of the time. Here an energetic continuation made itself felt of the direction that English psychology had taken in the eighteenth century. The theories of Hume and Hartley were developed further in the so-called psychology of association, which conceived mental life as consisting of a multitude of individual elements independent in themselves (sensations, representations, feelings of pleasure and displeasure), which can enter into looser or firmer connections (associations), when they come to appear together (simultaneously or in immediate succession), or when they greatly resemble one another. A principal work of this psychological direction is James Mill's "Analysis of the Human Mind" (1829). In Germany a kindred direction asserts itself in Herbart's "Psychologie als Wissenschaft" (1824). This psychology exercised a salutary opposition to the tendency of the time toward mysticism. It demanded a definite account of the origin of every connection of representations, and it moreover saw the validity of such connections as determined by the way in which they had been formed;
[46] the validity could not extend beyond the original occasion of the representations' connection. Thereby this conception acquired significance not only for psychology as a distinct discipline, but also for epistemology, in that it had to lead to a restatement of Hume's problem, which Kant thought he had solved, and which Romanticism had entirely pushed aside.

Purely psychologically, the principal question now had to become whether mental life could be explained as a mere sum of independent elements. By different paths this question has been discussed in the course of the century. A principal point of view here became that a sharp distinction had to be made between involuntary mental life, the actual mental states on the one hand, and on the other hand the individual "elements" that reflection and analysis can separate out. It is not justified to regard such elements as original; they come about in fact only when attention, the clearer consciousness, is directed upon what is involuntarily experienced. Reflection

is always something derived, however great and far-reaching its significance may become. With great energy this point of view was maintained by Schopenhauer, who in his doctrine of "the Will to Life" pointed back to the original instinctive foundation of mental life. Furthermore closer investigation of our representations showed that they never occur except in certain connections. They can go out of one context, but only to enter into another. Only at the boundary points of mental life, in transition to ecstatic states and in certain mental diseases, can they take on an approximately isolated character. In the domain of sensation, the contrast effect, demonstrated by Chevreul (1832), and the law set up by Fechner for the dependence of sensation upon the relation between the degrees of strength of the stimuli (1860), established that there were no absolutely independent sense-sensations.

By these different paths one was led to take up again the concept of human mental life to which Kant's epistemological investigation had led him, and according to which its fundamental form is a gathering together, a synthesis, an involuntary formation of wholes, which in science can become a function that is carried through with full consciousness. There is thereby introduced no special "force" into psychology, in analogy with the "life force" that people have wished to introduce into physiology. Synthesis is a law that makes itself known in all mental states; it is the form of all mental work. What reflection and psychological analysis can find will always prove to be special examples or forms of this fundamental form.

The historical character of mental life, so strongly emphasized by Romanticism and positivism, can thereby come into its full right, in that experiences, memories and *[47]* representations from the past, by virtue of the law of synthesis, will be continually interwoven with the new experiences and the new representations. The psychology of association too comes into its own, in that the association of representations is precisely only a form of synthesis. In particular the life of will, on which the voluntarism founded by Schopenhauer laid special weight, comes into its own, in that on all stages of mental life, from the blind, involuntary up to that guided by a conscious aim, there manifests itself, in many degrees and forms, a need for concentration. Instinct and genius, deliberation and decision here all come under the same fundamental concept.

The psychological conception thus characterized was prepared at important points by Fries (Neue Kritik der Vernunft. 1806. — Psychiche Anthropologie. 1820) and Beneke (Psychologische Skizzen. 1825). Later it was taken as a basis in one of the century's principal psychological works, Wilhelm Wundt's "Grundzüge der physiologischen Psychologie" (1874, since then a series of ever more extensive editions). The

present author in his critique of the psychology of association ("Den engelske Filosofi i vor Tid". 1874) took the same point of view as a basis and developed it in detail in his "Psykologi paa Grundlag af Erfaring" (1882). In French literature Alfred Fouillée ("La psychologie des idées-forces". 1893) has in particular developed a similar conception.

As regards methods of psychological inquiry, four different paths have presented themselves in the course of the century. The different methods can often lead to oppositions in principle, since the individual inquirer is unable to apply them all, and since mental life easily comes to appear in a different light according to the different path by which one seeks to penetrate into it.

First, it had to be a matter of penetrating observation and description of mental states, with attention to nuances and complications that the more abstract conception of earlier times had not allowed to come into their own. The most important condition for psychological study is and remains, after all, psychological sense, and one can be an acute analyst or a capable experimenter without possessing this sense. In two men, one from the first half of the century, the other from its end, this condition has been present in rich measure, and they have achieved excellent things in descriptive psychology. The one is the Danish psychologist Frederik Christian Sibbern (d. 1872),
[48] the other the American psychologist William James (d. 1910). Both had, besides the gift of direct observation, an open eye for the necessary connection between psychology and physiology. A characteristic contrast between them appears in this, that Sibbern, besides the many fresh observations he gives, has a tendency to divide his material into sharply delimited rubrics, whereas in James the classifying interest recedes before the picture of the total interplay of all the forces of mental life.

Second, the interest in psychological inquiry has led to this, that one everywhere, where it can be done, goes over from observation to experiment. This transition was prepared by physiological experiments by E. H. Weber (Tastsinn und Gemeingefühl. Wagner's Handbuch der Physiologie. 1846), who established the possibility of a measurement of sensations. Gustav Theodor Fechner carried this thought further through experiments of his own and by collecting material from the literature, and set up the law mentioned above, according to which the increase of a sensation does not correspond directly to the increase of the stimulus, but to the ratio between this increase and the stimulus given simultaneously or immediately before. Through its relation to external stimulus, sensation is thus accessible to measurement. Fechner's work (Elemente der Psychophysik. 1860) founded experimental psychology, and a new science was thereby formed, an intermediate link between the human sciences

and natural science. Fechner himself is — like Kepler in his day — an interesting example of how acute and energetic inquiry can carry through a thought in such a way that from a mystical-speculative initial form it can find grounds through exact investigation. On the basis of his work, without however quite reaching up to its level, experimental psychology has worked further to illuminate mental life, especially its more elementary functions, by way of experiment. In Germany it is especially Wundt and his disciples, in France Binet, in Denmark Alfred Lehmann, who have worked in this domain. Much indicates, moreover, that physiology is so essential a condition for experimental psychology that the new subject must rather be said to belong under physiology as one of the paths by which the latter can illuminate mental life.

Third, mental life is studied not only by the path of direct observation and experiment, but mediately, through the works in which it has revealed itself, that is, by the historical method, which at the same time becomes the comparative method. The study of literature supplies psychology with new material through the endeavor to go back from the literary works to the forces from which they have sprung. Here *[49]* the works of Ste Beuve, Taine and Georg Brandes are especially to be mentioned. The study of the visual arts can cast light not only on the mode of operation of the artistic imagination, but also on the different way in which the human life of feeling at different times relates itself to the same subject. In this direction Julius Lange's work "Menneskeskikkelsen i Kunstens Historie" (1898) is of great interest. Besides the psychology of literature and art, the psychology of religion must especially be mentioned, in that the history of religions leads to knowledge of the mental need that underlies them, and of the peculiar formations of representations to which this need leads. Of works in this direction Tylor's "Primitive Culture", Erwin Rhode's "Psyche", and Durkheim's "Les formes élémentaires de la vie religieuse" are especially to be mentioned.

Finally the study of mental diseases has been able from many sides to illuminate the general nature of mental life. There present themselves here, so to speak, experiments that nature itself makes, in that we learn the effect of the weakening and dropping away of mental functions and thereby gain insight into the really supporting forces in mental life. Of quite special significance here has been Charcot's work. From his school came psychologists such as Th. Ribot and Pierre Janet.

By these different paths an understanding is striven for that does not confound its own means and forms with the mental life itself that is to be investigated, but step by step seeks to penetrate into its subject, the most significant subject of all, and yet to

acknowledge it in its peculiar being. In this respect the Romanticism that introduced the century has had a salutary after-effect. Even the most critical inquiry into the phenomena of mental life stands yet with greater sense, perhaps even with greater reverence before it than the Enlightenment of the eighteenth century often did. A comparison between Voltaire and Ludwig Feuerbach would clearly demonstrate this.

The opposition between clear consciousness and mysterious unconsciousness, which — now for the benefit of depth, now for the benefit of obscurity and fear of light — played so great a role in the reaction against the eighteenth century, came forward again in the course of the nineteenth century as a reaction against the progressive intellectual work of the time. Most strongly and most dogmatically it was expressed in Eduard von Hartmann's "Philosophie des Unbewussten" (1869), whose fundamental thought is that conscious reason is only criticizing and controlling, never creating and inventing, for which reason man would lose his source of life if receptivity to the
[50] influence of the unconscious vanished. Psychologically speaking there is certainly much that is apt in this view, especially when one speaks not merely of the unconscious but of the involuntary. Just as, according to Carnot's principle, there is a constant tendency toward a distribution of heat, so that the condition for a new release of motion can thereby be removed, so there obtains in the domain of spiritual life such a relation between the involuntary life in instinct, feeling and impulse and the clearly conscious life in reflection and deliberation that, while the conversion can take place easily and involuntarily from the former to the latter, the division of energy that the intellectual life entails makes the conversion in the opposite direction not take place so easily. Long ago, especially in Rousseau's criticism of the modern culture conditioned by division of labor, warnings in this direction had appeared. — But in Hartmann's philosophy "the unconscious" appears all too often as an obscure power which, in spite of its obscurity, is to solve all riddles. He calls upon this power where his thinking can no longer solve the problems that it believes it must set itself.

In a more defensible manner William James has later pointed to what goes on beneath the "threshold" of consciousness or outside its "margin", and which is known only through its effects in consciousness. He emphasizes especially the way in which fear, remorse or anger can suddenly arise or resolutions be taken that are not fully understood from the preceding deliberations. He finds it very difficult to draw the boundary between what is above and what is below the threshold. Very often that which emerges from the "subliminal" or "extramarginal" comes forth as if it were an external, objective power making itself known to us. And here the seed may lie

both for all manner of superstition and for inward faith. More important than all the forms and ways in which men seek to interpret these intrusions from the world of the unconscious, which may recall Hugo de Vries's mutations, is for James the very fact that they are possible at all. After he had already, in his "Principles of Phychology" (1890), put forward this conception, he has developed it through a series of special examples in his work on the psychology of religion "Varieties of religious experience. A study in human nature" (1902).

There are, as is seen from this exposition, two principal problems that have occupied the psychological inquiry of the nineteenth century. The one concerns the relation between the manifoldness that every mental life presents in all degrees, right up to threatening chaos, and on the other side the collectedness and unity that is *[51]* in part a presupposition for a mental life being able to subsist at all, in part — in its pronounced forms — characteristic of what we call the higher stages of mental life. The other problem concerns the relation between the involuntary, perhaps unconscious, and the clear consciousness, of which reflection is in part an expression, in part itself the cause. That this problem does not coincide with the first can be seen from the fact that the involuntary, perhaps unconscious mental life may precisely present a closedness, a concentration, that reflection may have difficulty in reaching. Both the unity and the manifoldness in mental life may have the character of the involuntary. But the two problems can in many ways overlap, and thereby the most intricate mental relations come about.

Not only in theoretical psychology did these problems stir. They appear also in the practice of life and are characteristic of the mental life of the century, wherever this reached into the depths. Many a battle has been fought in silence to find a way, when on the one side the impulses of involuntary life and dawning representations press forward, and on the other side stirs the great need for clarity and understanding that was the good inheritance from the eighteenth century. In the autobiography that one of the century's eminent men, John Stuart Mill, has left behind, and which I have already had occasion to mention, one can study the conflict between these two tendencies in the first half of the century. For Mill it nevertheless remained firm that both understanding of life and a firm bearing in life could be won only when honest work was done to win clarity and to discover inner connection between our experiences. In other natures it was the fullness and need of mental life that gained the upper hand, but critical thought continually struggled with them, so that the thoughts one made about life could be uttered only in the form of paradox, as

more or less convulsive attempts to combine what could not appear in inner, natural connection. Natures of this kind, who through brilliant paradoxes won expression for a strongly strained inner life, were men like Carlyle and Kierkegaard in the middle of the century, Nietzsche and Tolstoy toward its end. These men take up, each in his own way, the problem of culture that Rousseau had so energetically brought forward in the middle of the eighteenth century. There was also (as I have sought to show in an essay on "Rousseau og det nittende Aarhundrede") a certain analogy in the spiritual situation in the middle of the nineteenth century and that which prevailed a hundred
[52] years earlier. In both cases a sharp opposition asserted itself between immediate experience of life and the personal striving conditioned by it on the one side, and the support that thinking and empirical science could give on the other side. However different from one another the men mentioned were, there is yet something common in their relation to the intellectual culture that their time had won. Kierkegaard and Nietzsche, e.g., stand indeed in the sharpest opposition to each other, but precisely this makes a comparison between them instructive in a psychological respect, and from an attempt I once made in this direction I shall here adduce some features that may be suited to the characterization of an essential side of the spiritual life of the nineteenth century.

The opposition might admittedly seem so sharp that it must stand as a strange thought to bring them together. The one maintained Christianity in its strictest form, sharpened orthodoxy to paradox and placed its doctrine in absolute and hostile opposition to natural human thought. In particular he placed Christian ethics in the sharpest conflict with human need and striving. The other was a radical free-thinker with so strong an antipathy to Christianity and to every conception of life akin to it that he could not find words strong enough to express his aversion. On the other hand he maintained with ecstatic enthusiasm the health and strength of human nature and believed in an ideal elevation of it. What the God-man was for Kierkegaard, the Superman was for Nietzsche.

But they meet in this, that both see far beyond the usual, delimited, rationally arranged paths of life. They maintain the innermost, the original in man as something that cannot be analyzed and formulated in an exact way, but which can nevertheless show itself as the strongest force and have the highest value. They apply, seen from a purely psychological standpoint, the same standard of personal value. The mental life stands highest for them in which the strongest oppositions and the pain they cause are overcome by a power of spirit that is able to go through purgatory. By toning

down the oppositions one lowers the level of life. The highest is the great courage that is required to subsist in the spiritual struggle. Kierkegaard saw the danger especially in aesthetic play with life; Nietzsche saw it in weakness and complaint. But both maintained that life must be conceived as a struggle to preserve both the fullness of life and its unity. Both denied that modern culture, with all its science, art and industry, satisfied the need of personality, and they were led at the same time — from two opposed points of view — to sharp opposition to the existing religious and church *[53]* establishment. They are symptoms of something that stirs in the age, and it has taken on a volcanic expression in them. —

From a purely psychological point of view, men such as these are regarded as subjects that set reflection great tasks. It would have to be a matter of finding how and to what extent what we know about the nature and laws of mental life can cast light upon the development of such figures, and how and to what extent this their development is connected with the spiritual conditions that prevailed in their time.

b. *Historical Science.*

When already within psychology, the central branch of the human sciences, a historical and comparative method asserts itself alongside observation and experiment, this must be still more the case with more special, more spiritual subjects. The development of the science of language in the nineteenth century is a great example of this.

The founder of the comparative science of language, the Danish inquirer Rasmus Rask (d. 1832), went beyond the earlier age's inclination, in investigating the mutual content of languages, to confine itself to the individual words and to find resemblances between them. He set explanation of language in opposition to explanation of words. The whole structure of a language and the changes it can undergo is more important than the transferences and changes of the individual words. The grammatical is more important than the lexical. For Rask, however, historical linguistic inquiry was subordinate to the systematically comparative. Without comparison with other languages the individual language cannot be understood either, and no distinction can be made between word and thought. Language was for Rask rather an object of nature, and knowledge of it recalled in his eyes natural history. He sought to find a clear and natural system, in part in the classification of languages generally, in part in the investigation of the individual languages. Bopp (d. 1867) carried the development

of the new science further, and Jacob Grimm (d. 1863) founded historical linguistics, in a certain opposition to Rask and yet in essential respects building on Rask's thoughts.

Vilhelm Thomsen, the brilliant successor of these inquirers, from whom I have
[54] taken these notes, makes the following comparison between his three great predecessors. "Rask, Bopp and Grimm have each in his own way contributed to introducing a new development of the science of language and laying the foundation of the comparative science of language: Rask first and foremost by his investigations of the Nordic languages, especially Icelandic, and by his systematic demonstration of the position and relation of this language to the other related languages in Europe, but next also of the various relations of kinship and points of contact of these and many other languages; Bopp by the way in which he takes Sanskrit into the comparison of the languages belonging to our stock and by his acute investigations of the whole structure of these languages; Grimm finally by his treatment of the Gothic-Germanic languages and by the fundamental way in which he applies the historical point of view." (Sprogvidenskabens Historie 1902).

What was here founded was carried further in the course of the century, in that ever new language families were taken up for investigation. What is of interest for an investigation of the century's leading ideas is especially the way in which scientific linguistic inquiry takes up the old question of the origin of language. Formerly this origin was regarded either as the fruit of human invention or as a divine gift to men. Eilschou found even a proof of the existence of God in the fact that men could not themselves have produced language. Both conceptions are equally external. Modern linguistic inquiry has even been inclined to push the question entirely aside. But just as one in geology proceeded from the view that the changes that now take place on the surface of the earth can cast light on the earth's revolutions in the past, so the linguists too became more and more aware that in the more recent languages one could study the changes that have conditioned the development of language. It was seen that language is something that is constantly coming into being, and it was concluded that the origin of language could not be thought in any other way and according to any other laws than those to which the changes now taking place in language point. The first to emphasize this with full clarity is J. N. Madvig, who in a long overlooked treatise from 1842 (Om Sprogets Væsen, Udvikling og Liv) maintained that we can find the very "act of language formation" in the way in which even now men's need for expression and communication continually manifests itself. Language must have been produced by men, for only "the language that men create can men

understand". But it came into being as involuntary outbursts, which were conditioned by influences that were accessible to several men; thereby the outbursts could become *[55]* common signs. Under the need to communicate ever more numerous experiences the development of language has taken place.

This so-called "principle of actuality" appears in the nineteenth century in various domains. In its generality it rests on the fact that we can understand the past from the present. In a certain sense this maxim was also applied in earlier times, but then it happened in such a way that the conditions and forms of the past were taken without further ado as if they were the same as those of the present. The closer determination that the principle of actuality receives in the nineteenth century consists in this, that it is not conditions and forms but laws and forces whose identity with those of the past is taken as a basis. One conceives how the laws we know would act under other conditions than those now obtaining. Both in the human sciences and in natural science this principle finds application. We shall meet it also in historical research in the narrower sense. It is connected with the principle of continuity, so strongly emphasized in the seventeenth century, which Leibniz in particular took as a basis in his philosophy, and which he grounded by reference to the many transitional forms in nature and by his mathematical theory of infinitely small quantities. (See especially his Lettre à M. Bayle and his Réplique aux réflexions de Bayle). And it manifests itself in the constant striving of science to convert qualitative differences into quantitative ones. —

Hitherto only two human sciences have been mentioned, psychology and the science of language. Comte wished to include them both as well as all other special human sciences that might be set up under sociology, which was to present the general laws, forms and processes of development of social life. Mental life and language were for him just as much social phenomena as morals and law. Sociology regards the single individual as a mere abstraction and maintains social influence in every spiritual manifestation of life. Thereby a great task is rather set, namely the demonstration of the individual's constant dependence on society, than a scientific discipline is delimited with full clarity. Experience shows us a constant interaction between individual and society, an interaction without which no new experiences and no new thoughts could acquire social significance. Without this interaction the transitions between the different stages that human social life, according to Comte, presents would not become intelligible either, for such transitions are traced first in a single, or at any rate relatively few individuals. According to Comte's sociology the

[56] different stages of social life are conditioned first and foremost by the development of knowledge, and this passes through, as we have already seen, three stages, the theological, the metaphysical and the positive. Comte now seeks to show that to these three stages there correspond different social forms of life. The theological stage is at the same time the proper period of militarism; to the metaphysical stage corresponds the rule of the jurists in the state; in the positive stage it is the industrials (employers and workers) who are in command. This ingenious generalization cannot be carried through in detail without constraint, and it lays — which may surprise in the very founder of sociology — not the chief weight on the real chief social problem, which springs from the relation between society and individual.

From this principal problem another sociological generalization, which appeared after Comte's time, takes its point of departure. Henry Maine (Ancient Law. 1861), and after him inquirers such as Herbert Spencer, Ferdinand Tönnies and Emile Durkheim, lay the weight on the opposition between the more primitive forms of society, where the single individual involuntarily shares the life of the horde or the tribe, and where perhaps not even the family exists as a tolerably independent whole, and the forms of society that are founded in detail on conscious agreements. The difference is designated as a difference between condition (status) and compact (contractus). It corresponds to the difference between the first and the second term within Hegel's dialectic, and to the difference between the theological and the metaphysical stage in Comte. It is certainly characteristic that this later sociological generalization dwells upon the very intermediate stage from which the century's older thinkers, Comte as well as Hegel, hastened with a certain haste over to the stage of consummation that Hegel called the higher unity, Comte the positive stage. It is at the intermediate stage that the real problems arise. Contract presupposes that the individual appears with independence, — that the one individual stands over against the other and over against society, with which in the first stage he involuntarily felt himself one. The question became whether the results to which his liberated and independent experiences, experience and thoughts led could agree with the life of representations that had hitherto prevailed in the society from which he himself had come, and from which he could never quite isolate himself. In a very interesting manner Tönnies (Gemeinschaft und Gesellschaft. 1887) has shown how the opposition maintained by Henry Maine between condition and compact is connected with the opposition
[57] between the involuntary forms of mental life, need, instinct, habit, faith in authority, on the one side, and the decisions and convictions founded on conscious deliberation

on the other side. To individualism in society there corresponds as analogue reflection in the single individual. In religious respect it is here that the opposition between faith and knowledge comes forward. In general condition and compact designate two different ways in which the fate of the single individual may be bound up with the group or society to which it nevertheless still belongs. Of the prospect of a higher unity, a harmony between condition and compact, this theory expresses itself very reservedly. As will be seen, it recalls the St. Simonian distinction between organic and critical periods, and it will later appear that it asserts itself in a significant way in what is called the social problem in the narrower sense.

Sociology, as it is conceived by Comte and his successors, recalls what in the time of Romanticism was called the philosophy of history. And like this it arose at the outset as an attempt to demonstrate a progress in the evolution of mankind. There made itself felt here an after-effect of the enthusiastic optimism of the eighteenth century, which has borne its most characteristic fruit in the Girondin Condorcet's "Esquisse d'un tableau historique des progrés de l'esprit humain" (1795), which he drew up while he kept himself hidden to escape the guillotine of the Jacobins. Sociology has, like biology, learned that evolution and progress are not the same. The bad evolves just like the good. And whence do we in the end derive the standard of bad and good? It is a problem by itself, and Comte was led in his last period to acknowledge this by distinguishing between ethics and sociology and extending his classification of the sciences by adding ethics as the seventh member of the series.

Sociology does not, however, stand in opposition merely to ethics, but also to historical research in the narrower sense. It does not count "history" as science. Sociology is to demonstrate definite social conditions according to their general nature, not to occupy itself with individual personalities and events, as history in the narrower sense does. From a purely historical standpoint Jacob Burckhardt (Weltgeschichtliche Betrachtungen, written from 1868 on, published 1905, after the author's death) has in contrast to this emphasized that in human history we do not have a single continuous process that could make the setting up of general laws possible, but several processes running simultaneously. Since simultaneity makes itself felt as well as succession, history cannot be laid out in a single line. Moreover *[58]* Burckhardt's studies led him to lay greater weight on the differences between peoples and between cultures than on similarities that could justify the setting up of general laws and of a common standard. He represents the opposition of history to sociology, denies the latter's scientific character, just as the latter conversely denies the scientific

character of history.

However it may now stand with the solution of this dispute, the interest in history in the narrower sense has so little declined in the nineteenth century that one might on the contrary with just as much right call it the century of history as it has been called the century of physics. There has undoubtedly in this century been greater historical sense than in earlier times. One no longer saw past ages either as in their essence like one's own age, so that the latter's representations could without more ado be laid back into them, or as quite opposite in essence, so that they came to stand as absurd. There is more capacity to enter into foreign psychological and social conditions and to see personalities, events and institutions in relation to the age from which they sprang, and which lived in them. In addition, the sources of historical knowledge were opened on a far greater scale than before, and among those who drew at first hand from these sources there developed a critical sense and capacity that measured and rejected the transmitted testimonies before they were allowed to determine the historical presentation. If a single man is to be named, it is the German historian Niebuhr who has given the program for the century's historical research. In a survey of historical studies in France, Langlois admits that the renaissance of these studies after the Revolution and the Restoration is due to the influence of German science, and he names Ernest Renan as one of the first who saw that Germany had continued the historical work that the scholars of old France had practiced, but which new France had let lie. Niebuhr declared that we never stand before the very events of the past, but only before the sources of our knowledge of them. This critical sense and capacity, which conditions the scientific character of historical research, is closely connected with the historical sense. When a testimony is rejected, it is precisely because it is regarded as unhistorical, as not being what it gives itself out to be. History is criticized from history itself. Every testimony must, after all, bear the stamp of its age, not merely the stamp of the events of which it wishes to report. — As an organ of this critical sense and capacity historical research is undoubtedly
[59] science, however it may stand with the possibility of finding laws for the relation between the events that historical criticism leads to acknowledging.

The historical sense developed under the aegis of Romanticism and positivism and had in its first forms the stamp of a reaction against the critical and revolutionary tendencies of the eighteenth century. The so-called historical school found a deeper connection there where Enlightenment and Revolution had seen only superstition or arbitrariness, and it had a great distrust of all works and institutions that were

the fruit of conscious reflection. In the domain of the legal system one was thus, as has already been mentioned, an opponent of codification, of conscious regulation and systematization of the laws, such as among others the English philosopher of law Bentham (who coined the word codification) demanded. A logical formulation of the laws was held to be impossible. Law was conceived, like folk poetry, as a child of the soul of the people, an involuntary expression of it. Mockingly Anselm von Feuerbach declared, against this view maintained by Savigny, that this child of the spirit of the people should thus at once be put out to nurse with the jurists; he pointed, against this German tendency, to England, where the science of law stands in close connection with practice, as this develops in the spirit of practical jurists through the administration of law itself. (Einige Worte über historische Rechtsgelehrsamkeit und einheimische deutsche Gesetzgebung. 1824). The historical school acted on the whole as a damper and a check on all striving for reforms, all initiatives in the political, social and religious domain, even if it did not directly subscribe to Hegel's proposition that the real is the rational. Leopold Ranke, whom one has called the greatest historian of modern times (Gooch: History and Historians in the 19th century), regarded the war of 1870, like that of 1813, as a victory of conservative Europe over revolutionary Europe. The historical school, in and after the time of Romanticism, was bound on the whole to arrive naturally at the view that the victorious has right on its side, — that power in and of itself is right. It was especially the Prussian historical school that took this point of view as a basis and sought to ground it. As a single example there may be adduced here an utterance of Droysen in his "Geschichte Alexanders des Grossen" (1833): "The great right of victory is always victory for a higher right, for the right that lies in the higher elastic force, in the superior evolution, in the driving force of a new thought rich in future." Some French historians, such as Augustin Thierry, have on the contrary shown an inclination to side with the vanquished, to emphasize the value of the culture that perished as a result of the struggle. What *[60]* points of view are taken as a basis here will depend partly on whether the people of the historian concerned has itself experienced victory or defeat, partly on the subjects he occupies himself with, partly finally, and this is here of the greatest interest, on how he conceives the relation between state power and culture. In his "Weltgeschichtliche Betrachtungen" the Swiss Jacob Burckhardt places culture in sharp opposition to state and religion. The former represents freedom; the latter are the realms of power; — the former is the mobile, the latter the stable. Burckhardt sees in history a constant conflict between these three "potencies", a conflict that for him essentially takes on a

tragic character.

The historical conception and appraisal will naturally depend to a high degree on the relation in which the historian himself feels himself to stand to these potencies. National differences too will have influence. They are traced right into pure sociology, which was nevertheless supposed to be independent of definite historical events and conflicts. It has thus rightly been found characteristic that Austrian sociologists, especially Gumplowicz, conceive social science as a doctrine of struggle of races, whereas English and French sociologists, such as Spencer and Tarde, conceive it as a doctrine of the positive unfolding of social life. It must in any case be the task of sociological and historical inquiry to find a continuity through and in spite of all conflicts and catastrophes. A significant work in that direction is Alexis de Tocqueville's work "L'ancien Régime et la Révolution" (1855), in which, in the words of a French critic, he did for history what Lyell did for geology, in that he rejected the theory of catastrophes in the historical domain and showed that what suddenly broke forth as transformative in the French Revolution had been prepared by the policy of the absolute monarchy through centuries. Later Kropotkin (Mutual Aid 1902) has sought to show that the catastrophe must in any case be dated back to the time when state regulation begins to take the place of the involuntary adaptation through interaction and mutual aid in the small societies, within which the neighborly relation could act as a support and supplement and prevent the isolation of the individuals.

In face of the emphasis on continuity in history the philosopher Charles Renouvier has raised a criticism, in that he found in it a tendency to embellish all that happens, by regarding it as the only possible and finding it justified thereby. He holds that it
[61] is especially Romanticism that has introduced this, in his eyes reactionary, way of thinking. In his remarkable work "Uchronie[*)]" ("L'Utopie dans l'Histoire" (1902) he wishes to show that it was by no means necessary that ancient culture should perish. From the second century after Christ (the age of the Antonines) there could — he holds — very well have unfolded other series of development than those that, through the dissolution of the Roman Empire, the Middle Ages and Catholicism, led to the modern age. Renouvier, to whom we shall return in another connection, wished by this view to strengthen responsibility and the consciousness of freedom against reactionary tendencies that think they can claim history for themselves. According to Renouvier too great a weight has been laid on the opposition to the eighteenth century, the real

[*)] Uchronia means that which does not exist at any time, just as Utopia means that which does not exist in any place.

period of breakthrough of free humanity. The historical sense, which is praised as the distinction of the nineteenth century, has led to one's entering into the past to such a degree that one did not understand the present and the possibilities for new points of development that it can present. And this whole historical determinism redounds to the benefit of political and ecclesiastical reaction! — Renouvier takes his stand in opposition to a tendency that corresponds to what in Germany was called the historical school. Here in the North a similar criticism had already long ago appeared against the historical school and its conservative tendency. It was in the year 1838 that the Swedish historian and philosopher Erik Gustaf Geijer broke with the historical school to which he had through Romanticism come to belong. And he has himself declared that it was through history that he had been freed from history, in that history equally well shows us the new that emerges as the old that persists. He saw the possibility of a generation's being able — as he expresses himself — to "walk away from inheritance and debt" and try to strike out on new paths in confidence in possibilities that were not yet realized. This break, Geijer's so-called "defection", became of far-reaching significance for his political, pedagogical and religious views, in that it led him to the setting up of the so-called principle of personality, to which I shall return in another connection. —

From a quite different side the Romantic-historical tendency was attacked by Karl Marx's so-called materialist conception of history. The Romantic-historical conception laid the weight on the all-governing influence of ideas and traditions. In opposition thereto Marx (Das Kapital. 1867) maintains that it is economic factors and interests that determine historical events and upheavals, however much the *[62]* acting persons believe themselves guided by great ideas surfacing in their minds or by venerable traditions. Both cultural history and political history are determined according to Marx throughout by economic causes. It is the laws of production and distribution, in particular the constant conflict between capital and labor, on which according to Marx it finally depends. In the section on leading ideas in the domain of social life we shall return to this point.

6. PHILOSOPHY IN THE LAST PART OF THE CENTURY

a. *Can Philosophy Give Closure to Thought?*

At the middle of the century it was really only in England that philosophizing was done in an independent and free manner. It was Stuart Mill's Logic and philosophy of experience that had the floor; he succeeded Comte as the spokesman of positivism. After the collapse of Romantic speculation there came in Germany a time of weariness, which was, however, filled out by learned, in part monumental works on the history of philosophy. Hegel had sought to demonstrate a connection within the history of philosophy, and it was men of his school who took the lead in the great historical orientation over the course of the development of philosophy, an orientation which, moreover, in several respects led to a correction of Hegel's views. In the first rank here are to be named Eduard Zeller, Kuno Fischer and J. E. Erdmann. Many of the great figures of philosophy now came to stand in a new light, and it was shown what significance thoughts that are really grasped out of the innermost nature of the life of thought and of experience can have for all times, even if the form in which they first appeared is subject to perishability. At the same time one had, through comparative historical study, to become clear that there are, after all, different starting points for philosophizing. Truth can and must be sought by different paths, and the difference of points of view can be leveled out only gradually through ever more deeply penetrating conceptions of the problems. A Danish philosopher, in whose view the thought plays a leading role that all development proceeds from scattered points in order then gradually — under favorable conditions — to lead to a formation of a whole, has also applied this thought to the working conditions of philosophy. Sibbern, who in the Forties in various works, of which may here be mentioned
[63] "Filosofiens Begreb, Natur og Væsen" (1843), summed up the principal results of his philosophizing, maintained that a complete systematizing of philosophy was not possible. Our experience proceeds always from the first sporadically. Existence opens itself to us from several points at once, as the different methods and views of the individual sciences already show. And every individual philosopher begins from his particular standpoint, — indeed, philosophy itself is only one of the many processes that unfold in the spiritual world, and it will always have a struggle to sustain, not only with other scientific endeavors, but also with the manifestations of spiritual life that appear in art and in religion. And even if through the debate of everything against everything, which is always necessary, a comprehensive system should at a given time work its way forward, the work of thought must nevertheless be taken up anew in every new age. For while the systematic work is in progress, there will, since life never stands still, accumulate a new material of experience, which will have

to be taken into account. — From such a point of view Sibbern had already earlier (1838) criticized Hegel's philosophy. In particular he saw clearly the untenability of Schelling's and Hegel's philosophy of nature, which in its arbitrary symbolizing did not let the lawlike connection that natural science demonstrated come into its right, and he sought himself in his philosophical works to acknowledge this right.

It was, as we have seen, especially two thoughts that marked a great contribution to the conception of the world from the side of natural science, the principle of the conservation of energy and the doctrine of the origin of species by evolution. Two ingenious German thinkers, Gustav Theodor Fechner and Hermann Lotze, sought to let the fixed order of nature, which expresses itself in these doctrines, gain a decisive significance in their philosophy, without thereby giving up the idealistic basic view through which they felt themselves akin to the Romantic philosophers. Could the ideas not well be effective, even if they cannot work magic? — asks Lotze. Because one is not permitted to explain the individual phenomena of nature by appeal to ideas or any other form of spiritual intervention, it may very well be that idealism is right in the last word that thought can say. Even if a strict realism must rule in our attempts to explain what happens in the world, it might yet be that this very realism rested on an idealistic foundation. All science, even the most exact, rests on certain presuppositions, builds on certain basic thoughts, which by the nature of the case cannot themselves be grounded by the realistic way of thinking that rests on them. Realism ends in a limiting concept, in the thought of a rational connection in the *[64]* world, a thought that is presupposed in all natural science, but not itself exhausted in any single law. It is only by virtue of this limiting concept that we can speak of the unity of nature. If one wishes to form for oneself a closer representation of this unity, that is, of "that which holds the world together in its innermost", then there is — Fechner and Lotze see this clearly — only one way that stands at our disposal: the way of analogy. We go this way when we believe that what underlies existence is of spiritual nature; for we then assume that, as a human body is related to the soul of man, so nature is related to the Godhead. But the justification of such an analogy cannot be demonstrated by the way of strict inference. Romantic speculation, on the contrary, believed precisely that it was going the way of strict thinking and would not admit that it worked with images and analogies. It confounded identity and analogy.

Earlier in the century Schopenhauer and Beneke had maintained that our concluding thoughts are built on analogy. And here too there is a great predecessor in the seventeenth century, namely Leibniz, according to whom all metaphysics and all

religion builds on analogy, and who calls analogy "mon grand principe des choses naturelles". Fechner has expressed this thought in "Elemente der Psychophysik" (1860) and in "Die Seelenfrage" (1861), Lotze in "Mikrokosmus" (1856—64). What the two philosophers do not state with full clarity, any more than Leibniz, is where the boundary lies between the analogies they make use of in the rounding off of their thought, and the purely poetic images. Only when such a boundary can be determined will the way be barred to all dogmatism.

It was this indeterminate boundary that made Wilhelm Wundt apprehensive about the standpoint that Fechner and Lotze took up. Wundt, who in various domains did great work to build philosophy on firmer ground and give it systematic connection, could not find that analogy was a sufficient support for the rounding-off concept of unity that philosophy, in his view too, seeks. We cannot, he holds, remain standing, as Spinoza does, at a ground of unity whose constitution is not more closely determined. We must investigate which of the concepts that experience has led us to form is best suited to be an expression of the principle of unity in existence. He admits that we have here the choice between thinking it as material and thinking it as spiritual, and since spiritual existence is the way of being that appears most immediately to us, most
[65] resembles what we experience in ourselves, it is analogy with it that we must keep to. (System der Philosophie. 1889). It is only a faith, but it is, Wundt holds, a faith whose necessity we can prove. — Wundt overlooks here that this necessity would be present only if it could be proved that the essence of existence was exhausted by the two forms of existence appearing in our experience, the material and the spiritual, so that we had a forced choice between them. But the difference between the spiritual and the material is purely factual and therefore does not exclude, as Spinoza already saw, the possibility of other forms of existence. Even if an absolutely compelling counterproof against materialism could be produced, idealism would therefore not be strictly proved. We do not stand here before a strict either-or. Fouillée, Bergson and Spencer stand on a standpoint similar to Wundt's.

That there cannot be proved to be a forced choice between the two analogies, the author of this exposition has sought to show in the epistemological part of his "Religionsfilosofi" (1901) and more fully in "Den menneskelige Tanke" (1910). —

When Spencer is named among those who go the way of analogy to the last rounding-off concept, it might seem striking. In the first place he stands nearer to positivism than any of the philosophers just mentioned, and in the second place the essential task of his philosophy was to demonstrate the concept of evolution as a

basic concept in all domains. He seeks to establish that there are certain features that recur in all domains and that make up the content of the concept of evolution. Every subject of experience presents, when we follow its coming to be, three stages. In the first it appears as a collected and uniform whole; in the second more and more differences appear, and in the third these differences are ordered into a more or less harmonious whole. The three stages may be designated as concentration, differentiation and harmonization. Evolution in the sense of a process that runs through these three stages can, according to Spencer, be demonstrated in all domains (geological, biological, psychological and sociological), and he has in a series of works sought to ground this assertion. But beyond such processes of evolution appearing in experience we can, he maintains, have no grounded knowledge. If we nevertheless seek out beyond them, we stand before the Unknowable (the unknowable) (First Principles. 1861). In a more special connection (the concluding section of "Principles of Psychology") Spencer does, however, declare that, were he to choose between a materialistic and an idealistic interpretation, he would prefer the latter.

The conception of the limits of philosophical thought that emerged in the views *[66]* discussed here received, as we shall see, a closer determination and grounding through the resumption of the problem of knowledge that is characteristic of the last decade of the century.

b. *Division of Labor within Philosophy.*

Toward the end of the century a change made itself felt in the manner of philosophizing, apart also from the views just mentioned, especially in that the division of labor, which had already advanced far in the domains of the individual sciences, now also appeared in philosophy. For the Romantics, as for most older philosophers, there existed at bottom only a single problem, the problem of existence (the cosmological or metaphysical problem), and all other problems were subordinated to it and solved in connection with it. But now psychology, epistemology, ethics and philosophy of religion step forward with their particular tasks and methods, and the question then approaches, in what sense philosophy can still be said to constitute a whole. — Psychology has already been discussed. Philosophy of religion will be discussed on occasion in a later section. Here, therefore, only ethics and epistemology will be dealt with, and finally some remarks will be made on the state of the cosmological ("metaphysical") problem.

α. *Ethics.*

In the domain of ethics, two views stood opposed to one another at the beginning of the century, and their influence extended, despite Romanticism and positivism, right up through the century. They were Kant's ethics, grounded in the concept of duty, and Bentham's grounding of all morality in the desire for happiness. Both theories had appeared at about the same time, namely in the penultimate decade of the eighteenth century. Kant proceeded from the view that when there is to be talk of general rules for human action, and moreover of rules that can come forward with authority in the face of man's individual drives and wishes, they must have their root in reason, the same reason that in science leads man to cognize the lawfulness of nature. That an action is a duty can be grounded only in its answering to a demand that must be made of all rational beings in the same situation as the agent. The consideration of the action's effects, by contrast, has no ethical significance; such a
[67] consideration would make ethical evaluation dependent on experience. According to Bentham, on the other hand, it is precisely the consideration of the effects of actions that grounds ethical evaluation. Only those actions are good which, directly or indirectly, in their more remote as in their nearer effects, lead to happiness or utility for human beings. Bentham combats the "rights of man" which the American and the French Revolution proclaimed as self-evident. There are no original rights. A man's right rests on the effects of his actions toward happiness or utility. But if man only rightly understands what can bring him happiness now and in the future, he will act in such a way that the true desire for happiness of other men too can be satisfied. Well-understood self-interest is, according to Bentham, the foundation of all morality, and he was fully and firmly convinced that when all men merely followed their own advantage with prudence, it would turn out that the interests of all were in mutual harmony.

To understand the position of the new century toward these views, it must be observed that both Kant and Bentham proceeded from presuppositions that were given no place in their theories. Kant had (as I have sought to show in a treatise on the course of his philosophical development) arrived at his ethical conception through the study of the struggle that is carried on in the course of history between human interests, a struggle that can end only by means of a social order within which the freedom of the individual is limited by the conditions of the equal freedom of others. His ethics thus stands at bottom as an anticipation of the goal of historical

development, as an ideal we must follow in order to work in the direction of this goal. Hence Kant could in his work of old age "Zum ewigen Frieden" (1795) maintain that moral evil dissolves society and therefore must in the end dissolve itself, whereby it paves the way for the good. It is thus the struggle for the continued existence of a human society that is the real presupposition of Kant's ethics. As for Bentham, his delight in the harmony of interests cannot be explained from a purely individual standpoint. When the single individual has only the prospect of securing his own isolated interests, it may after all be a matter of indifference to him how it goes with the interests of all others. It is thus a social motive of evaluation that underlies the place the harmony of interests occupies in Bentham's theory. Bentham's German successor Beneke has already emphasized this.

Both of the two great ethicists thus point, without being aware of it, to social *[68]* life as the foundation of ethics. And it was precisely here that the new century took hold, as soon as it had recovered from the great upheavals with which it was ushered in. Both Hegel and Comte, both Romanticism and positivism, found here their stage. Their ethics is essentially social; the duties and rights of the individual are conditioned by their being members of a society.

When Hegel in his very first drafts proceeds from the people organized in the state as the presupposition of ethical ideas, there is at work in this not only opposition to Kant's attempt at an ethics of pure reason, but also, and especially, his studies of ancient culture. The subjective, individual ethical feeling, conscience, is really a product of dissolution, which arises when advancing culture and critique abolish the people's involuntary and in part unconscious adherence to custom and usage. The isolation of individuals thus arising is abolished again when they freely see themselves as members of the great whole that the state is. (Phänomenologie des Geistes. 1807). Hegel's ideas here recall the thoughts that Fichte — as mentioned in an earlier connection — had set forth shortly before in "Grundzüge des gegenwärtigen Zeitalters". In Hegel's chief ethical work ("Philosophie des Rechts". 1821) the higher unity that comprises within itself both right and morality is designated as "Sittlichkeit", which appears in the family and in civil society (economic life), which in turn both find a higher unity in the state, which is "the reality of the ethical idea". Only by being a good citizen in a good state does the single individual attain full value, not by standing on his abstract right or by insisting on his conscience.

Like Hegel's ethics, Comte's has the character of a reaction. The "positive" (scientific) way of thinking is, according to Comte, the best safeguard against anarchistic

excesses (divagations anarchiques). — "Esprit positif" does not, however, come into play only in science; it is already at work in sound human understanding (le bon sens universel) and in the experiences of which it is the expression. All human development takes place within a society, which binds the individuals together, so that a feeling of solidarity becomes possible. Thereby there is gradually developed a disinterested sympathy, an altruism (a word coined by Comte to designate the opposite of egoism). The stages in spiritual development that precede the "positive" each favored egoism in its own way. At the theological stage everyone is absorbed in his own personal salvation. And at the "metaphysical" stage it is the single self that believes it finds
[69] truth through its intuitions and speculations. At the "positive" stage, by contrast, one follows with attention the influence that every action, every need and every feeling has on private or social life, and on the basis of such experience the rules for human conduct are formed. Society is not merely a product of human calculation; in that case it would never have come into being. But at the properly human stage (as distinct from the animal) reflection and social need work together (combinaison de l'intelligence avec la sociabilité constitutes the human attribute). (Discours sur l'esprit positif. 1844). In contrast to Hegel, Comte lays little weight on the social institutions, in particular on the state. Once the right reflection and the sound, involuntary social life have developed, such institutions will easily come into being. In Comte's eyes the social questions, as they are discussed by men of science ("philosophers") in interaction with employers ("patricians") and workers ("proletarians"), stand above the political ones and will more and more push these aside. (Politique positive. 1851–54).

While Romanticism, in its conservatism, proceeds from the organized society and its authority over the individuals, positivism proceeds from the living forces which may gradually lead to social organizations. But according to both conceptions ethics is social ethics from first to last. In the face of what conditions the continued existence of society the single individual's desire for happiness or his own convictions become a vanishing element, a drop in the ocean. Hegel's line of thought lies in this respect at the base of Karl Marx's grounding of socialism (Das Kapital. 1867), to which we shall return in a later section. In purely philosophical form Wilhelm Wundt in his great work on ethics (1887; 4th ed. in three volumes 1912) has taken up Hegel's thoughts again on the basis of what has emerged since his time in the way of facts and ideas. In his preface Wundt expressly acknowledges this kinship with Romanticism, which he praises because it — despite all its fantasies — has widened the horizon and paved the way for "the more universal conception of spiritual life, which is now a common

possession of all the human sciences." The French sociological school has worked in connection with Comte. Its first man, Emile Durkheim, regards the dependence of the individuals on society and the moral feeling thereby conditioned in them as the fact underlying all morality (le fait moral, se Bulletin de la Société française de Philosophie. 1906) and has especially illuminated the development of modern industrialism in its connection with the advance of the division of labor within society (La Division du *[70]* travail social 1893). The ethical theories developed by philosophical thinkers stand for the sociological view as various attempts to rationalize the moral process that prevails involuntarily (in the time and people of the thinker concerned). "A man's conscience, or his moral ideal, however high it may stand, is so to speak never his own work, except for a vanishing small part. Like the language he speaks, the religion he professes, and the occupation he holds, they are the results of constant participation in a social reality which is infinitely more comprehensive, which existed for him, and which will outlive him." (Levy Bruhl: La Morale et la Science des Moeurs. 3rd ed. Préface).

In the face of conceptions like these there naturally arises, however, the question on what the value of society ultimately rests, and who is to decide whether this value is present in the individual case. The problem of value cannot be dismissed by however thoroughgoing historical or sociological demonstrations of the individual's social dependence. And history itself demonstrates (and has not least since the close of the century demonstrated) that it always depends on whether there is something in the inner life of the individuals that asserts or confirms the value and significance of society. Under primitive conditions the individual involuntarily shares the lot of society and follows its demands; here education, tradition and faith in authority prevail. But both Romanticism and positivism have themselves shown how in spiritual and social development a critical stage naturally sets in (which is designated now as negation, now as differentiation), where what has hitherto stood as self-evident is put under debate, a debate which will precisely concern the value and justification of that in which one has hitherto involuntarily rested. In such a critical period the individuals compare the demands of society with the conditions given in experience. And to this is added that different social formations may occur within the same people. Thus church and state may stand against each other, aristocracy and democracy, intellectual and material culture, employers and workers. How can this debate end? Is there a rational solution to it? Not to mention that different peoples or states stand as the expression of different, perhaps mutually hostile social formations, and which

"society" then has right (value) on its side? It is no accident that Hegel and Comte, Wundt and Durkheim with predilection dwell on "organic" periods or look toward such in the future.

[71] In ethics one cannot refrain from discussing the psychological presuppositions. And it will be necessary to seek out constantly operative motives, which can make themselves felt in critical no less than in organic periods. Comte here relied on the altruistic (sympathetic) feelings and their growth in the race and found in them the foundation of all social ethics. He has here English philosophers from the eighteenth century (Hume and Adam Smith) as his predecessors. Stuart Mill subjected (in his treatise "Utilitarianism" 1861) Bentham's doctrine of utility to a revision which led him to emphasize the significance of sympathetic feelings as an element in moral feeling. Herbert Spencer goes further in this direction, at first in connection with Adam Smith. He finds in involuntary sympathy a foundation which through reflection and understanding can be developed into the feeling of justice which alone makes true ethics possible. (Data of Ethics 1879. — Justice 1891). In the same direction goes my exposition of ethics (1887. 4th ed. 1913), which at the same time, however, stresses the epistemological presuppositions of ethics, which are presumably far too often pushed aside on account of the still prevailing dogmatism in the ethical domain.

The point is that, just as in the face of a purely social ethics it can always be asked why just the interests of this particular society are to be taken as the basis, one can in general in the face of any motive of evaluation always ask why just that one is to be decisive. The psychological basis of ethical judgments is, no more than the sociological, the same in all men and at all times. The sporadic, of which Sibbern spoke so much, makes itself felt not least here. A motive of evaluation cannot without further ado be forced upon everyone, as the first presuppositions of logical and mathematical thinking can be (because they are contained in all thinking). There is then no other way to go in a scientific treatment of ethics than to procure an overview of the essential motives of evaluation that can make themselves felt, and to investigate to what extent the evaluations that must be made on the basis of them can be brought into mutual agreement. Here there will perhaps sometimes prove to be an irreconcilable conflict. But often it will prove that what from one motive of evaluation stands as an end (with immediate value), from another stands as a means (with mediate value). Perhaps such a result of the discussion can then gain retroactive force, so that the fundamental motive concerned is shaken in its full dominion. Each single exposition of ethics must of course proceed from a determinate fundamental

value, but there must then be an express consciousness that the fundamental motive thereby determined has a struggle to endure in the face of other fundamental motives *[72]* that come forward with their demands. The significance of the single exposition will then depend on the light which it, through consistent application of the fundamental motive and through the abundance of experiences by which this application can be confirmed, casts on the nature of the fundamental motive. The Danish exposition mentioned proceeded for its part from the feeling of humanity (altruism, universal sympathy) which developed toward the close of classical antiquity, was thereupon in part deepened, in part limited by Christianity, and later in the eighteenth century was asserted with full consciousness by French and English thinkers. — It was the application of epistemological critique that led to this conception, in natural connection with the predominant significance which epistemological problems on the whole acquired toward the close of the century, as we shall see later.

It has on the whole been characteristic of ethical theories in the nineteenth century that the question of the relation of ethics to strict science was given special treatment. This question appears not only in the form just mentioned, that is, with regard to the possibility of rational and universally valid grounding of ethical evaluation. It also appears in the form that it is investigated whether ethics should rest on presuppositions that stand in contradiction to those otherwise taken as the basis in science. Can ethics be reconciled with the recognition of the lawfulness of nature, when we take "nature" in the widest sense, so that the human life of the will also falls under it? — One could here hold that a real proof of the principle of causality is not possible. Hume's problem still stands. But the talk here is of the presuppositions without which science, here science of real subjects, would not be possible; and to this the principle of causality decidedly belongs. We also see that even those who maintain "freedom" in the sense of freedom from having a cause, the so-called indeterminists, endeavor to restrict this freedom to the least possible. So modest one was not in the good old days. Often one means by "freedom" merely that something new is put into the world through human actions. William James's standpoint is here characteristic. The only "free will" he acknowledges rests on the character of novelty which can arise in a situation where we act. (Pragmatism 1907). All acknowledge that something new can arise, in the domain of the life of the will as in all other domains. Actions can surprise both the agent himself and others. But this character of novelty by no means abolishes the possibility of afterwards finding the cause of the arising of the new. It *[73]* goes here as with the so-called mutations in the biological domain, which precisely set

the task of finding the cause of them. The need to find a cause, the need without which science of real subjects would not have come into being, is itself explicable only by the fact that something stands for us as new and surprising, perhaps in decided contrast to what precedes, and that we nevertheless seek to get beyond this difference. This need is closely connected with the nature of personality, which precisely expresses itself in a striving to get beyond the chaotic, the incoherent. And where the talk is of human actions, it becomes then of quite particular significance that they can be understood in their place within the whole personality of the agent. If indeterminism has had to restrict itself in the course of the nineteenth century, this is undoubtedly connected with a deeper understanding of personal life.

The pragmatic point of view which James adopts leads him to complain that the question of "freedom" has been put in such close connection with "accountability" (this contemptible right to punish which has made such a noice in past discursions on the subject). As a pragmatist James looks forward, not backward. The old doctrine of retribution, on the other hand, which underlies the popular conception of "accountability," looked only backward, looked only at what had been done, not at what the effects of the action and of the punishment would be. Kant conceived of remorse as a retributive punishment. Already Fichte looks differently at the matter when he declares that we have not time to repent, because new action is constantly required of us. He overlooks that remorse, the painful consciousness of having erred ("the painful identity"), can be necessary as a spur to future action. But even then it is the effects of remorse, not its causes, that are decisive for the value that is attributed to it. Utilitarianism exerts its quiet influence here even on those who do not acknowledge it as a theory. And it makes itself decidedly felt in modern theories of punishment, which have abandoned the theory of retribution and rely on the deterrent and educative effects of the treatment of punishment in order to ground the right to punish.

Even though the discussion will for a long time yet move forward and backward, the general direction in which thoughts have moved in the nineteenth century is clear and beyond doubt. What matters is to give both life itself and the understanding of life
[74] what is due to each. Life unfolds now with clear consciousness, now unconsciously, and by both ways it can bring forth what stands as new and wonderful; but the need for understanding constantly demands its right and sets reflection in motion as soon as the prehistory of the action can be surveyed. We live forward but understand backward, a Danish thinker has said. How far understanding can reach is a matter in itself. —

Not only the relation to scientific understanding in general has posed problems for ethics. Quite especially Darwin's doctrine of the struggle for existence was bound to arouse the attention of those who thought about ethical questions. It is in this connection a matter of indifference whether one attributes to this doctrine significance for the understanding of the evolution of the species or not. What is at issue here is the fact that all living beings must satisfy certain conditions in order to be able to subsist, and that they perish when they are unable to. It then depends not on the value of a form of life whether it can subsist, but on the external conditions, independent of all value, in which it is placed. Here is no difficulty, when at every moment, particularly in such moments as when one is about to succumb in the struggle, one can invoke a supernatural power capable of upholding the values. But an ethics that takes its stand on the ground of natural human life and of experience seems here to face insuperable difficulties. Will not brutal force, ruthless egoism have the greatest prospect of victory, however ideal the conditions of life it comes to trample underfoot? Fr. Jodl says in his "Geschichte der Ethik" that the modern doctrine of evolution brought the greatest crisis that ethics has had to go through in modern times. It will have its interest to see to what extent and how the attention of the philosophers has been aroused to this question.

The first to be named here is Friedrich Albert Lange, the brilliant author of "Geschichte des Materialismus." He saw clearly the significance of the struggle for existence as the foundation of the great social problem. As a creature of nature man seeks to assert himself and to fight his way forward to conditions that satisfy and secure the impulse of self-preservation. This impulse one cannot get around. It yields only when either another, stronger impulse is raised against it, or when it can be satisfied by ways that make possible the satisfaction of other men's impulse of self-preservation. All ethical and social endeavors must therefore carry on a struggle for existence and set a higher and better right in place of the mere right of self-preservation. In this spirit Lange illuminated the social question in his writing "Die *[75]* Arbeiterfrage" (1865), a few years after Darwin's famous book had appeared. Darwin himself came upon the problem in his second principal work (Descent of man. 1871). He pointed out that the qualities which the struggle for existence strengthens are not only those that are beneficial to the single individual, but also those that are to the benefit of the helpless offspring or of the group to which the individual belongs. The sympathetic feelings too have their natural history, not only the egoistic. And when the need to live together with others (sociability) and the capacity for fellow-

feeling with others (sympathy) are combined with memory and reflection, there is a foundation for the development of ethical feeling. Darwin here stands at a standpoint similar to Comte's. And he refers to the fact that the qualities which men at different times regard as virtues are closely connected with the extent to which men come into contact with other men. In a similar spirit Bartholomäus Carneri ("Sittlichkeit und Darwinismus" 1871) took up the question, though he emphasized more than Darwin the power of thinking to raise man above the animal stage, so that in spite of and through the struggle for existence there could take place a growth in the direction of magnanimity, self-control and harmony. For my part I laid the emphasis, in a little writing "Om Grundlaget for den humane Etik" (1876), on the fact that the struggle for existence always means a struggle to preserve the determinate form or kind of existence in which one lives. It is not merely bare existence that is at stake; man fights to exist in and for that which has the highest value for him, whatever that may be. Therefore the ethical striving too is a struggle for existence. Later ("Etik". 1887) I have shown more closely that self-assertion in and of itself is an ethical end, since society consists of and in single individuals; self-preservation and self-development are therefore a duty which the single individual has not only toward himself, but also toward society. And further, that devotion and sacrifice do not stand in absolute opposition to self-assertion, but, where they are genuine, are due to a surplus of energy that makes it possible to fight for that which is not necessary for one's own, isolated self-preservation. And finally I have stated that ethics does not stand and fall with faith in a progress within the world of experience, such as many evolutionists have assumed. "Even if the victorious tendency in the course of the world ran counter to ethics, the ethical principles would not be shaken. There would be greater use for pity and resignation; but where the ethical disposition was present, one would hold
[76] with the defeated cause, though the gods held with the victor. Ethical value does not rest on mere might. He who follows his conscience can of course do so only because it is the strongest thing in himself; but he does not do so because it is the strongest in the world."

The most considerable of the authors who have sought to make the concept of evolution and the doctrine of evolution fruitful for ethics is Herbert Spencer, whose "Data of Ethics" appeared in 1879 to be incorporated later as a part of his comprehensive "Principles of Ethics." I therefore dwell somewhat more closely on him, without being able to go into the interesting thoughts of Rolph (Biologische Probleme. 1880), L. Stephen (The Science of Ethics. 1882) and Alexander (Moral Order and Progress.

1889). Spencer criticizes utilitarianism, as Bentham and Mill had conceived it, because in his opinion it was inclined to keep to the nearest effects of actions. Since mental life, like everything else in the world, is subject to evolution, one will by attending to the general law of evolution find the foundation of the ideal toward which one can strive. The perfect human life will present the picture of a harmony between concentration and differentiation, like every evolution that completes its course. And in this harmony self-preservation and sympathy are united, whereby the principle of welfare comes into its own. Spencer lays particular weight here on the fact that a man's faculties do not come to full development when he limits his striving to his own, isolated ends. There are forces which only through altruism come to full unfolding. With this will follow a limitation of one's own freedom where it would involve encroachment upon the equally justified freedom of others. To his surprise Spencer arrives here (Justice 1891, fourth part of "Principles of Ethics") at the same result as Kant. But the existing society goes, according to Spencer, in its demands far beyond the limit thus set, in that it undertakes tasks that ought to be left to the free, altruistic activity of individuals. On the whole the existing social order satisfies the demands of ethics far from adequately. Militarism, which by compulsion bends man to obedience and regards obedience as the highest virtue, and industrialism, which demands work for the sake of livelihood, must give place to a type of life in which work is practiced not merely for the sake of the result, but because it is immediately attractive and satisfying. A model of this we have in intellectual and artistic work. The time will come when the sense of duty is unnecessary, in that there has developed an "organic morality" which makes right action as natural and involuntary as a mother's *[77]* care for her child and the artist's work on his work is. —

The "naturalistic" character which an ethics built on the concept of evolution and the principle of welfare acquires has provoked critique from the "idealistic" side. As considerable works in this direction must be named Guyau's "La Morale Anglaise Contemporative" (1879) and Sorley's "Ethics and Naturalism" and his "Recent Tendencies in Ethics" (1904). The dispute here concerns mainly whether an inner connection can be demonstrated between the stages by which, according to the doctrine of evolution, life's elementary need and force can be converted into forms that may rightly be called "higher." It is at once a dispute between continuity and discontinuity in the ethical domain (in that "idealism" will deny that connection) and an epistemological dispute about the grounding of the standard according to which an expression of will is called higher or lower than another. Here, as in other domains,

subjects enough are left for discussion in the new century.

β. *Epistemology.*

For the greater part of the century those who philosophized had been concerned predominantly with winning a world-view. Among positivists and Romantics alike a systematic tendency made itself felt. In the face of the cosmological (metaphysical) problem the problem of knowledge had been pushed aside, if one disregards Stuart Mill's energetic attempt at the middle of the century to let Hume's problem come to the fore again. But he did not see that the problem, whether it could be solved or not, now had to be posed differently. On the side of both of the two philosophical tendencies Kant had been regarded far too much as a standpoint that had been overcome. This greatest philosopher of modern times had shortly before the beginning of the century completed a profound investigation of human knowledge, its forms, its presuppositions and its limits, and had declared such an investigation to be the most important task of philosophy. In urgent words he had impressed the importance of what he called "the scientific self-knowledge of reason." Both Romantics and positivists saw a predecessor in Kant's philosophy; but they thought they had given it all that was due to it, and had taken up in their new views everything in it that had lasting significance. Later in the century minds were occupied with the grandiose
[78] extension and carrying through of the theories of natural science. The question must nevertheless naturally force itself forward: why did Romanticism go too far in its speculations? why did positivism not go far enough? by what right does natural science come forward with a claim to universal validity? It is one and the same question that underlies these three questions. And if it is raised in earnest, it must lead to taking up the problem of knowledge again. Epistemological points of view had now not wholly vanished. Fries and Schopenhauer in Germany, Kierkegaard in Denmark and Renouvier in France had maintained that Kant was no standpoint that had been overcome, and that his way of posing the problem must still be of the greatest importance. And when the philosophical discussion in the last part of the century apparently presents the curiosity that the philosophy of Romanticism, in particular Hegel's philosophy, after having been driven from the scene in Germany, gains diffusion and adherence in England, America and Italy, a closer examination of the most important works belonging here shows that the whole standpoint is rather Kant's than Hegel's. We meet thoughts from the concluding section of the

"Elementarlehre" in the "Kritik der reinen Vernunft" (the doctrine of ideas as ideals of knowledge, which cannot be shaped into strictly scientific knowledge). This holds of the most important work in this whole group, Francis Herbert Bradley's brilliant work "Appearance and Reality" (1893), which has rightly been called the book that in the last generation has exerted the greatest influence on philosophical thinking in the English-speaking countries. Proceeding from the view that all thinking sets its subjects in mutual relation to one another (the relational way of thought), and that only complete experience can reveal reality to us (complete experience the standard of reality), he draws the consequence that a closure of our knowledge is impossible; ever new relations need closer determination, and experience can ever become more complete. That he does not become a skeptic is because he maintains (not always with full consistency) that "the Absolute" does not lie remote, beyond everything limited, but makes itself felt at every stage. Every stage has its truth; no province is severed from the whole realm of truth. A kindred line of thought is found in Josiah Royce in America (The World and the Individual. 1900) and in Benedetto Croce in Italy (Logica come scienza del concetto puro. 2. ed. 1909 — Ciò che è vivo e ciò ê morto della filosofia di Hegel. 1907). Croce has expressly declared (in a "Critique de moimême," which was translated in Revue de Métaphysique et de Morale. 1919) that when his conception has often been designated as neo-Hegelianism, one could with *[79]* just as much right designate it as neo-Kantianism or neo-positivism, and he rightly points out that the features most characteristic of Hegel's system are lacking in him.

Although Kant could thus not be said to have been forgotten, it was yet natural that an endeavor stirred to take up Kant's problem again. In the last generation of the century the cry accordingly also sounded: "Back to Kant!" At times this battle-cry perhaps became merely the introduction to purely historical-philological studies of Kant's works; but these too were necessary and had the significance of fixing attention on the elements in his philosophy that were the most essential, and which one had often lightly pushed aside. For independent thinkers the said watchword meant a resumption of the problem of knowledge itself. If a single work is to be named which can be said to mark a turning point, it must be Friedrich Albert Lange's "Geschichte des Materialismus" (1866). Aroused by him, but in turn acting back upon him (as can be seen from the second edition of the said book) Hermann Cohen began his ardent Kant studies, which first led him to a thoroughgoing correction of the current conception of Kant (Kant's Theorie der Erfahrung. 1871), later gradually to the development of an independent epistemology (Logik der reinen Erkenntniss. 1902). Cohen is the founder

of the so-called Marburg school, the most energetic and influential epistemological tendency of the present. Characteristic of this tendency is that scientific thinking is set in sharp contrast to the ordinary life of consciousness, as this involuntarily unfolds itself through sensation, memory and spontaneous reflection. Kant had shown that natural science comes into being by the individual observations being shown to be members of a great whole ("Nature"), whose individual parts are connected with one another with logical-mathematical necessity. He admitted, however, that between the necessity of thought which strict science lays at its base and the observations at hand there is only a relation of analogy (cfr. the section "Die Analogien der Erfahrung" in "Kritik der reinen Vernunft"), not, as within pure logic and mathematics, a relation of identity. This concession to empirical philosophy the Marburg school takes back, in that it regards it as an after-effect from Locke and Hume, an after-effect that had hindered Kant from solving Hume's problem. The observations are, when they have gone through the sharp examination of thought, to be able to make complete
[80] confession of what they fundamentally contain, and this content comes into its full right through the equations in which natural science expresses its results. Differences of quality and time have vanished without a trace in the scientific conception, — and vanished to such a degree that the founder of the Marburg school is not merely astonished, but indignant that Hume could have found so great a difficulty in the transition from quality to quality and from moment to moment. — As the Marburg school corrects Kant, it leads not only back to Plato, but beyond him to Parmenides of Elea, and it is with full consciousness that it acknowledges this kinship.

In a peculiar contrast to criticism, especially as it was developed in the Marburg school, there appears the so-called pragmatism, which lays weight on the fact that it is always determinate needs, certain express tasks, that determine the forms and principles of our thinking. We form, this tendency maintains, the concepts and set up the maxims that we have need of. The forms of knowledge are determined by the tasks which the subjects set us, and are not, as zealous Kantians hold, independent of these. Pragmatism arose at about the same time in different places. The name is American, derives from the mathematician and philosopher Charles Peirce, who maintained (in a treatise of 1878) that in order to find out the meaning of a thought, one must look to what action it leads to; if there is no difference between two thoughts in this respect, then there is in general no difference between them. William James took up some years later (1898) both the idea and the expression pragmatism. For him it was not merely a theoretical idea; not only intellectual, but also practical needs

condition our thoughts; not only our science, but also our faith is always built up pragmatically. The famous physicist Maxwell (died 1879), who also left philosophical treatises behind, saw the progress of the exact sciences as conditioned by the fact that one could form conceptions of the subjects that could at once represent every special subject and make rigorous inference beyond the subjects at hand possible. He too saw the significance of principles in their being usable, in particular for directing definite questions to the subjects at hand. Maxwell arrived at this conception of knowledge through his experiences as a working physicist. But he was also influenced by his teacher in philosophy William Hamilton, who precisely laid strong weight on the self-activity of thinking as more important than all single results, and who even set up the paradox that a living error was better than a dead truth. Through Maxwell *[81]* Ernst Mach (from 1863 on) has come to kindred ideas of knowledge and has found them confirmed by thoroughgoing studies of the history of the natural sciences. His concluding work is "Erkenntniss und Irrtum" (1905). He stresses particularly (here in connection with Spencer) the development of knowledge as a constant adaptation, which leads to thinking the subjects with the greatest possible economy, which shows itself in our preferring the simplest explanations, — in our rather reshaping old thoughts according to the new subjects than forming wholly new ones, — and in our working with analogies in order to let one domain of subjects illuminate another. Richard Avenarius (1876) joins the inquirers named, in that he had by his own way come to conceive philosophy as "the thinking of the world according to the principle of the smallest measure of force" (as the title of his habilitation writing runs), a conception he later developed at length in his principal work "Kritik der reinen Erfahrung" (1888—90). In the attempts at epistemology that have appeared in Danish literature, standpoints are adopted which make it possible to let both pragmatism and criticism come into their own. Thus when Kroman ("Vor Naturerkendelse". 1883) declares the fundamental principles of knowledge to be pure postulates, but at the same time teaches that our impulse of self-preservation leads us to set up certain quite determinate postulates and not others. Likewise when the author of this exposition in his Psykologi (1882) showed how the involuntary need for action already leads to performing experiments which impress upon us the connection of things, and how practical needs thereupon awaken wishes and expectations, which are provisionally held fast until experience either confirms or rejects them. A germ of the principle of causality lies already in the involuntary orienting oneself in the world, which tacitly proceeds from the view that everything that exists must stand in unavoidable

connection with one another. In "Den menneskelige Tanke" (1910) it is shown how the development of the forms of knowledge is conditioned by the questions or problems that are posed, but how already the fact that a problem, a question, can be posed at all presupposes an energy which expresses itself through spiritual work in determinate forms. A problem arises only when there is either something in our conceptions which needs to be filled out, or when there is mutual contradiction between the conceptions we have formed. In both cases there is presupposed the capacity to combine and compare, of which Kant had so clear a view, and which he called synthesis. The single
[82] forms of this activity of thought (the categories) come forth under the interaction with emerging subjects that the history of science demonstrates, and can thereafter be ordered in a series advancing from the general to the special. —

Kant had sanguine conceptions concerning the possible completion of the critical philosophy he had founded. Not only did he think he had set up a definitive list of categories, but he even stated in the concluding words of the "Kritik der reinen Vernunft" (1781) that everything that human reason could require for its satisfaction could be attained before the close of the century. The Marburg school, the ablest reviver of criticism at the close of the nineteenth century, cannot, as we have seen, be acquitted of a certain dogmatism either. Pragmatism is a salutary counterweight on this point. It points (like evolutionism) to the possibility that the forms of thought and presuppositions at which we finally stop, and which according to Kant were to be the expression of the innermost essence of the human faculty of knowledge itself, could themselves be derived in relation to more deeply lying principles whose time has not yet come (if it ever comes). Epistemology would in this respect stand before a situation similar to that of modern physics, which still recognizes the maxims from which the physics of the seventeenth century proceeded, but sees the possibility that they could be derived in relation to maxims whose time is only now coming. Criticism will always retain the last word in the face of pragmatism, but when will the moment come when it has said its last word?

γ. *Cosmology ("Metaphysics").*

But now the problem which for the philosophers of earlier times stood as the real, the central philosophical problem, and which one often believed one could immerse oneself in without taking epistemological detours, — the problem of the ultimate

ground of existence, the metaphysical, or as I prefer to call it, the cosmological problem? Can we have a grounded thought (Logos) about the world as a whole (Cosmos)? What fate has this problem had in the nineteenth century? — For Romanticism it stood as the only problem; for positivism it was no longer any problem; for criticism it lies infinitely far out on the horizon of thought; pragmatism holds (in some of its forms) that it can solve it with a practical postulate. Yet there also exist more thoroughgoing considerations on its problem and its significance.

[83] It has been shown in the foregoing that eminent inquirers, to whom this problem lay seriously at heart, had become clear that the only way by which one could arrive at a conception of what holds the world together in its innermost was the way of analogy. One had come away from the belief that a definitive result here could be reached by the way of pure thinking, of strict deduction. Only one was not clear what the ground really is why one is forced out onto the way of analogy at every closure or rounding off of knowledge. Several inquirers have taken up this side of the question. Thus Fouillée (L'Avenir de la Métaphysique. 1889), the author of the present exposition (Filosofiske Problemer 1902. — Den menneskelige Tanke. 1910), Dilthey and Wundt (Kultur der Gegenwart I, 6. 1907). Among older inquirers Fries is especially to be named.

Analogy plays a great role in all science, in that inquiry illuminates the one domain of experience or domain of thought by means of the other. Whether the chosen analogies hold, that is, whether they can be carried through with full consistency (without "the comparison limping"), one will in the single, special cases be able to decide by testing whether a series of subjects within the one domain corresponds point for point to a series of subjects within the other domain, perhaps even so that full proportionality obtains (not merely relationality, but identity of relation) between the two series. In the last case one can apply what Mill has called the method of proportional changes. But in the case of the cosmological problem, which is to concern existence ("the world") as a whole, as comprehended into a unity in a fundamental law or a concluding principle, one is cut off from proceeding by means of such formations of series. Existence as a whole is not a subject for our thinking that could be compared with other subjects. It "does not step forth as one object among others, several." We know existence only through all the various subjects which our knowledge can face, and in every group of subjects existence reveals itself in a different way, without our yet having any certainty that its innermost essence is exhausted by the subjects that stand at the disposal of our knowledge. Since it is now — in any case at the point

of development which science has so far reached — not possible to lead all subjects back to a single subject, a basic subject ("Urfänomen"), there will be no other way than to use a single subject, or a single group of subjects, to characterize existence as a whole. And the different sciences then contend for the right to be decisive for
[84] this characterization. The history of the problem shows how one has constantly gone the way of building on an analogy between the totality of existence and a single subject, to which one, with clear awareness or quite involuntarily, ascribed fundamental significance. Thought (logic) or on the whole mental life (psychology) as the characterizing subject leads to idealism; physical and chemical processes (natural science), regarded as primal phenomena, lead to materialism. If one takes as basis the fact that general laws prevail in the world, so that it thereby appears as a unity, one gets a monism (which in turn can take on an idealistic or materialistic stamp); if one holds to the fact that the subjects are different, and that new, surprising subjects can constantly emerge, one gets a pluralism (which likewise can in turn be either idealistic or materialistic). And to this is added the ethical interest, which often leads to seeing existence as the home for the unfolding of values, perhaps under hard opposition. In the choice of a characteristic subject which every cosmological attempt presupposes, it is very often this interest that, with greater or lesser consciousness, underlies it. Fichte therefore declared in his time that the philosophy one chooses depends on what kind of man one is. And Jacobi added that every philosophy has its holy place.

When clarity comes over this relation, it cannot arouse surprise that philosophers more and more let the cosmological problem lie and merely set it up as a limiting problem. Those who in our day venture with full confidence to give a positive answer are for the most part not philosophers by profession. If it is nevertheless maintained that there is here a real problem, and that it is of importance to set it up with full clarity, this is for two reasons, which Kant has already pointed to. — First, the human mind works in the face of all subjects to comprehend them into a whole, and limits cannot be drawn in advance for this striving. There sounds here an Excelsior, which springs from the innermost nature of thought. When it can no longer be heard, that means the death of the life of thought. Even though it is clear that an absolute closure is not possible here, there will yet be a need for a provisional rounding off, even if this were to hold only for a single generation or in the end only for a single thinking personality. And every serious striving in this direction can have its significance, if not directly, then at least through its side effects, through the light that is cast on the nature of human thinking or on the nature of the single age or the single people, or

in any case on the character of the single thinking personality. Even where it ends *[85]* with a question, this can be of great significance; the nature of human thought shows itself no less in being able to ask than in being able to answer, and the capacity to ask rightly is in the long run the most important. If it is so that an absolute closure of knowledge is impossible, then the last word of thought must be a question. — Second, despite all critique there will again and again show itself an involuntary tendency to conclude, in that now supposedly theoretical, now supposedly ethical-religious or poetic motives lead to maintaining a determinate light as that in which "the world" both can and must be seen. Here there is need of a vigilant philosophy, which can keep order in the spiritual domain, so that immature conceptions do not obtain rank as the highest wisdom. Precisely because it is often ideal motives that lead to cosmological speculations, what matters is a critique that can distinguish between illusory satisfaction and the valuable starting point. What matters is to keep dogmatism out without, however, hampering the constant striving after truth, which for great spirits has had greater value than possession would have had.

Tegnér says in a letter (to Hagberg. 26 Nov. 1820) that poetry is mankind's purest, highest, most human expression, and that everything we regard as noble and high is nothing but modifications of it. Religion is a poetry limited on practical grounds, "circumcised," and science, especially "metaphysics," is "castrated" poetry. There is this truth in the remark, that man's great urge to expand, his infinite longing, can be satisfied only imperfectly through the conceptions of religion and the concepts of science and above all must not be confused with them. It is possible that a great and high poetry will some day replace both religion and "metaphysics," and that the boundary between science and art will be able to be drawn with full definiteness, without any spiritual loss being felt in observing this boundary.

II. SOCIAL LIFE

1. *The Social Question.*

In the eighteenth century social and political questions had already before the *[86]* Revolution been discussed with great energy and ruthlessness, but only within a small circle of free spirits, who were even very apprehensive of the thought that these discussions should be able to influence larger circles. They felt quite sure, however,

that "enlightenment would not reach the suburbs"; free discussion and the perspectives of the future to which it led were to and must be reserved for "respectable people." Although in the eighteenth century there stirred a consciousness of the existence of the social problem, it was nevertheless, until the Revolution had gained speed, limited to a few. It is Jean Jacques Rousseau who has posed the social problem through his critique of modern culture, which by the division of labor in the material domain makes the individual worker a machine or even merely a link in a machine, and which in the spiritual domain detaches the life of thought from its natural connection with instinct and feeling. The involuntary forms of life are threatened with dissolution.

The changed position which the social question acquires in the course of the nineteenth century is conditioned first by the fact that the distress in the world of labor increased or at any rate was felt more strongly, but second by the fact that conditions in the domain of material culture became more sharply illuminated through growing experience and more thorough reflection, a reflection that was awakened in people in all strata of society. The decisive peculiarity in the appearance of the question in the nineteenth century consists precisely in all classes of society taking part in its discussion. Of this one had as yet no examples in history. The obscure multitude that constituted the lowest stratum of societies had hitherto made itself heard only through revolt — slave revolts, peasant wars, etc. — Now it itself came
[87] forward in order, through its deliberations and resolutions, to help find ways out for the ailment of society. The Revolution's proclamation of liberty, equality and fraternity awakened the conception of an ideal in relation to which reality had to come to stand in a harsher light than as long as one had had no inkling of new possibilities. "Enlightenment" had reached the suburbs. One got beyond the eighteenth century's aristocracy of the spirit. Among many in the better situated classes an understanding and a practical sympathy made themselves felt which had hitherto been lacking. To a great extent it was also men of these classes who took the lead in the discussion and directed the work that led to progress. It was of great importance that the intellectual and the material forces could meet, so that the discussion of the great problem could be undertaken, not only by those who had time and capacity for carrying through reflection and thorough study, but also by those who suffered directly under the conditions.

It was naturally not always an elite from both sides that conducted the discussion, and not infrequently it was interrupted by violence and excesses. During the class struggle that developed on account of the conflicting interests, taunts were hurled

from both sides — at times it was the same derisive designation that both parties used. Characteristic is especially the role that the word "mass" came to play. From the conservative side the workers were called "the great mass." They were in the first period of the century still unorganized, without firm order and without clear conceptions of their own advantage as little as of the conditions of social life. Then there fell away, for an aristocratic view (which was far from an aristocracy of the spirit), all awareness that one stood in the face of personal, individual beings who wished to live life in a human manner, and it was feared that in the chaos one thought one saw before one, all culture, or at any rate what one regarded as culture, would perish. On the other side the workers and their leaders used the word mass as a taunt against their opponents from other social strata, whom they regarded as unjustified enjoyers of what they had not themselves produced, and they had no understanding of the inventiveness and energy, of the work in the service of inquiry and progress, which the third estate had rendered. Both parties were moreover inclined to think that the problem was wholly new. And yet it is a question that under various forms runs through the whole of world history, and which — strange as it is, but psychologically understandable — presents itself especially just after certain advances have been made in the direction of emancipation. As long as bondage or serfdom lasted, the single bondman or serf still belonged to the house or to the estate, could feel solidarity with *[88]* its interests and have his existence secured by belonging to this determinate, narrow circle, just as the master's self-interest had to lead to providing help and protection. But when the patriarchal order had led to abuse, and when the relation of dependence therefore loosened or was dissolved, this emancipation led to the single freed man being isolated and referred to fighting the battle of life on his own account. Then a social question arises. Protection has disappeared, and no new refuge, no new support is to be found. Poverty developed in the Middle Ages especially after the cessation of personal slavery, and a similar increase of distress arose with the cessation of serfdom and with the abolition of the guilds. The abolition of the old forms was in each of these cases an act of justice on account of the great abuses that had taken place, but at the same time posed problems that could be solved only by new expressions of the justice that had led to the emancipation. These new expressions were slow in coming, for a historical view on account of shortsightedness on both sides.

Were a determinate point of time to be indicated as decisive for the social question of modern times, the German economist Lujo Brentano has presumably rightly emphasized the turn which was brought about by world trade from the thirteenth and

fourteenth centuries on gaining decisive influence on production, so that this was not, as hitherto, predominantly determined by domestic or local need. Exchange value now gained predominance over use value. More capital and more workers were now needed than the localized turnover had required. And the new hosts of workers came from the country, in the beginning especially freed or fugitive serfs. Thereby began the influx from country to town, which in the eighteenth century Rousseau and other authors complained of, and in which they saw a phenomenon of dissolution.

It was thus not a wholly new problem that the nineteenth century had to wrestle with, but a problem that had developed through centuries, although it now acquired a quite peculiar sting, partly on account of the development of economic conditions, partly on account of the most immediate preceding age's critique and revolution. No wonder that it has weighed upon many, and not the least, of the century's people like a nightmare, and is directly or indirectly connected with the pessimistic current that again and again surfaces in the course of the century. Nor any wonder that the century, despite much good will and great ability, comes to leave the problem
[89] to its successor or successors. But the consciousness of its existence is awakened as never before, and through the discussion in science, in the press and in the popular assemblies provision has in any case been made that it will not so easily vanish.

2. *Practical Progress.*

Even though there were some who already at the beginning of the century saw the difficulties for social life that lay in the labor question, there prevailed nevertheless on the whole in the first decades a confidence that one was on the right path. Both personal freedom and freedom of trade had after all been proclaimed! Now everyone could take hold according to his ability and his inclination. In economic activity one saw either, with Adam Smith, a need laid down by Providence in human nature, whose effects were bound to be to the benefit of society, if it were only allowed to move with full freedom, and that it could now, — or one saw in it an expression of a natural law, which worked with necessity and would surely be able to heal the ills it might for a time bring with it.

It must surely be maintained that the conception that proclaimed free enterprise as the one thing needful and trusted the impulse of self-preservation in the individuals as the best guide, arose among the spiritual leaders of the age either from religious presuppositions or else from the conviction that the one right way to general welfare

was for everyone to look after himself. Jeremy Bentham, the most considerable philosopher of law of the age, saw in the prudence with which individual men work each for his own happiness the sure foundation of right and morality. He was himself guided by sympathy with men. It was by virtue of this sympathy that he rejoiced in the harmony of interests which he was sure would reveal itself when all followed their self-interests with prudence. — Naturally there were not a few for whom this faith in the harmony of interests was a welcome ground for isolating themselves, looking after their own advantage, baking their own cake, and so letting the others look after themselves, whether they had a cake to bake or not.

For the workers, on the other hand, it was bound to appear as if it were a wholly strange world into which they had come. They had their freedom, but they also had their empty hands, and the increasing use of machines seemed bound to diminish the use there could be for human labor. What were they then to use their freedom for? In *[90]* the face of the absurdities, incomprehensible to them, that they encountered, despair and defiance often found vent in the destruction of machines and in other disorders.

Thus on the one side one trusted in the blessed effects of freedom, on the other side one did not see what one was to use freedom for. — It turned out, as a Danish author has expressed it, that the goddess of freedom did not, as many believed, heal all wounds, but that she only laid them bare.

The principle of freedom had in the American and French Revolutions been proclaimed as a self-evident truth. But the proclamation itself had been called forth by the experiences that had been had of abuses and oppressions to which old, self-outliving institutions gave occasion. Since the associations of the past, in particular the guilds, had led to abuses, one went in one's zeal so far as to forbid all associations, both among employers with one another and among workers with one another. This prohibition stems from Turgot's ministry. It was repealed at his fall, but issued again during the Revolution (1791), and a corresponding law was issued in England (1799). Later too the theorists long regarded industrial associations as pernicious, because they hindered the "free" use of forces. And the workers themselves were long in realizing that the prohibition of associations was the most important obstacle on their path. Even the radical English politicians, who worked for the repeal of the prohibition, because it conflicted with the principle of freedom, which must surely also comprise freedom to join with others, — even they thought that the repeal of the prohibition would have no essential effects. It was to turn out quite differently.

In spite of the prohibition the workers had formed associations, which were perse-

cuted (while no action seems to have been taken against the employers' associations). But the most important workers' associations held the struggle out. And when the prohibition was repealed in England (1824), on which occasion Francis Place especially, who later played a great role in the first parliamentary reform, was active, association took speed. Craft unions were formed and joined together (into Trade Unions), and there now showed itself a great solidarity within the working class.

The development in England became a model for the course of things in other countries, and we need not follow this in detail. With the great associations — besides
[91] craft unions: producers' and consumers' cooperatives — a new social and political power had entered the world. It was then a wholly new principle that underlay it, for the right to association was, as the radical English politicians saw, a consequence of the principle of freedom; association was a continuation of emancipation. At the same time association was a preparation for the brotherhood that, though proclaimed later than freedom, was thought to belong closely together with it. This association within the working class is the greatest social event of the nineteenth century. It came into being after much groping and amid much envy. — I permit myself to repeat here what I said on this in a speech at the University in my last lecture hour in the nineteenth century (19 Dec. 1900).

"A social movement like that which has taken place in the nineteenth century no earlier age has been able to show. Hitherto history had moved over the heads of the great mass. The historical struggles were fought out between the higher strata of society, and the obscure multitude took no active part in them. At first slowly, but then with increasing speed the emancipation and organization of the working class has advanced, and it has become possible for it in an independent manner to take part in the public discussion and in the work of legislation. Immature humanity has not waited for the ideas to come to it; it has grown up, so that it could itself catch sight of the ideas and become receptive to them. For with the advancing organization and the increasing independence the need for participation in ideal culture has also risen in the great multitude ..... Never in history has ideal culture had so broad a basis in the human race as now. Its finest works will always be born in solitude, and it will for the present, perhaps forever, directly and with full understanding be able to be enjoyed by only few; but through intermediaries and many conversions it can now come to the benefit of ever growing circles. Whatever difficulties may remain, — the time of dullness and blindness is past." —

As long as the associations comprised only the skilled workers, they signified an

aristocracy within the working class. It is now once and for all so that development proceeds by strata, and the difference, in part the contrast, between the various strata of workers constantly makes itself felt, milder or stronger, in the subsequent history of the social question. But the socialist ideas, which more and more gained scope, led to a widening of the framework and to the organization of the unskilled workers. The whole movement is, however, not merely an application of the principle of freedom *[92]* to ground the right to association; for through the associations the self-esteem of the individuals grows, the horizon of their sympathies is widened and the need for knowledge is awakened. And the struggle did not concern merely the assertion of a human standard of living; they strove for a shortening of the working day, so that there might be time and strength left over for participation in spiritual culture. The worker felt himself to be something other and more than a mere means for production and was himself recognized as one of those for whom production was to come to benefit. What a great moral philosopher had stated toward the close of the eighteenth century, — that every human being is to be regarded as an end and never merely as a means, — that now moved toward its realization.

Of great importance it also became that a regular negotiation with the other classes was now possible, partly through the overview of economic conditions that the workers themselves could now more easily gain, partly by courts of arbitration now being able to be established, before which the interests of the various groups can be weighed, and their conduct attacked and defended. Through this the other classes of society are educated no less than the workers; they learn that there are other social worlds than their own, and they learn to know the limits of their own justified demands. In the negotiations that were conducted it has often turned out that it was two ethical systems that stood opposed to each other. There was often a lack of presuppositions recognized by both parties. Often it was external compromises that for a time halted the struggle; but through the whole course of the strife it could yet be traced that the presuppositions approached one another.

3. *The Struggle of Theories.*

As can be seen from the practical development characterized in the foregoing, this development takes place involuntarily and often unconsciously under the influence of certain presuppositions, which either are due merely to the experiences of the past or also contain germs of new directions of thought. Thus the principle of freedom led

beyond the limitation that for a time one had wished to set for its application; free association was its inevitable consequence, and this in turn led to new relations of power within society. The organized workers stand now as a power in the state.

With this another point was also connected. The principle of freedom had had
[93] its significance in opening the possibility of initiatives, of new directions of work and new institutions. It became of significance for production. The older political economy (Adam Smith and his successors) was essentially a theory of production and its conditions. But gradually the question of distribution pushed itself to the foreground beside the question of production. It turned out, namely, that the law of the harmony of interests did not in fact hold for the existing economic society. Production itself suffered under the workers' unfortunate economic circumstances, and the producers too came to suffer more thereby than they were aware. When the social utility which Bentham had demanded was to supply the standard, then the distribution of what is produced must also become an essential point of view. The eminent position that Stuart Mill at the middle of the century occupied in the history of the social question is due especially to his clear distinction between the conditions of production, which can in part be formulated as natural laws, and the conditions of distribution, which are essentially connected with social relations of power. (Political Economy. 1848 — but especially in the 2nd and 3rd editions). By this distinction Mill at this time thought he could mediate between capitalism and socialism, which more and more came into opposition to one another in theory as well as in practice.

Socialist theories had long since made themselves felt, in the age of the Renaissance for example in two brilliant works, Thomas More's "Utopia" and Campanella's "Solstat." In the nineteenth century they swarmed forth in manifold forms. One can, as I have sought to show in my "Etik" and still maintain, distinguish between four main forms of socialism, the utopian, the philanthropic, the speculative and the empirical.

Utopian socialism springs from the imagination, which is set in vibration by the distress of the time and driven to shape pictures of the future that depict a harmonious society in which remedy has been found for all social ills. Such depictions (in Danish literature Sibbern's may be mentioned) have their significance, partly as expressions of where one at a given time thinks the shoe pinches, partly as symptoms of the direction in which one imagines the help to lie. A characteristic feature of most depictions of "Utopia" ("a land that lies nowhere") is the weight laid on men getting sufficient leisure, so that their spiritual faculties can be developed outside the domains in which their special work lays claim to them.

Philanthropic socialism, which in the nineteenth century is represented by St. *[94]* Simon, Owen and Fourier, springs from love of mankind and appeals to the feelings of men. It conceives free associations as the way to the goal and trusts that employers and workers will be able to work together without compulsion by the state. In England, France and Switzerland, and thereafter in other countries, this tendency has exerted great influence through the establishment of producers' and consumers' cooperatives.

Speculative socialism, whose chief man is Karl Marx (Das Kapital. 1867), looks with scorn on the fantasts and the philanthropists. It maintains the possibility of a purely rational demonstration that the course of history leads in the direction of a concentration of capital in very few hands, while at the same time the distress of the workers rises in an ever stronger degree. When the workers, driven forward by distress, then unite and seize political power, it will be an easy matter for them to expropriate the few capitalists and thereby get the means of production into their power. It is not, however, the single workers who will come to own the means of production, but the state, whose policy the working class will then come to determine.

Empirical socialism, whose chief work is Sidney and Beatrice Webb's "History of Trade Unionism" (1894), demands that it be investigated, particularly by way of experiment, which domains are suited to communal or state operation, and which must for the time being or perhaps forever be left to private enterprise. —

Another division of the socialist theories has been attempted by Werner Sombart (Kapitalismus und Sozialismus) and after him by Muckle (Geschichte der sozialen Ideen im 19. Jahrhundert). These authors distinguish between rational socialism, which holds that a certain determinate social order is a necessary consequence of the very nature of man, and evolutionary socialism, which does not assume unalterable norms for social order, but maintains that the social forms of life undergo constant changes, whose goal and direction thought is to find in order thereafter to determine what the necessary course of things must bring in the direction of social order. I cannot see that all the views mentioned above can find a natural place when the contrast between an unalterable human nature and a constant process of evolution is taken as the basis. Neither utopians nor philanthropists need regard the nature of man as given once and for all. And for the very significant empirical socialism there is no place at all, although it seems to acquire greater and greater significance. The four kinds I find stress respectively imagination, feeling, thinking and experience. But since these mental elements never work isolated each by itself, but always in *[95]* connection with one another, there can be no sharp boundary between the four kinds.

In the present the greatest weight is to be laid on the contrast between speculative and empirical socialism. It is really between them that the battle now stands. It will therefore be of interest for our task to characterize them somewhat more closely.

Speculative socialism as Karl Marx, after several preliminary works, had presented it in "Das Kapital" (1867), became in the last part of the century of overwhelming significance in the social struggle. It did not recognize Mill's distinction between production and distribution. The state ought on behalf of the workers to take over the means of production and the whole work as well as the distribution of the proceeds of labor. Material labor is the source of all value. Social development, especially the division of labor, has led to the means of labor (the land and the tools) having gone out of the hands of the workers and come into the hands of a few capitalists, to whom then the greatest part of the proceeds falls. But future development will lead to the power of capitalism being broken through the political power of the workers, and the state then takes over the management.

Marx's theory is a theory of catastrophe like Cuvier's geology. Concerning the state of things that will set in after the catastrophe, he expresses himself in his later writings very indefinitely. He and his followers think that it is early enough to speak of the future state when the catastrophe is over. Here the speculative construction thus fails, which was applied with self-assurance as long as the talk was of the past.

While older economists thought they could demonstrate eternal laws of labor, social laws of nature, Marxism maintains that all social laws are conditioned by the economic relations which at a given time obtain. And that holds not merely for the laws of the ordering of labor. The whole life of the state, as well as all science, art, morality and religion, is derived from and conditioned by the economic relations existing at each time, is really only a reflection of these. It is not men's thoughts that order their life, but the practical, economic conditions of life that condition their thoughts, their imagination and their feeling. Therefore the whole of history is a series of class struggles.

The grandiose picture that Marx has sketched of the course of development in history is, however, not, as he thinks, the fruit of pure objective, intellectual investigation, without all moral or "ideological" presuppositions. Marx is a great
[96] ethical idealist and speaks in the end in the name of justice. Thereby is understood the indignation that breaks forth between the lines of his book, which according to the program was to be a logic on an evolutionary basis. In a single place he even directly expresses a principle that directly recalls Kant's moral principle. He declares, namely,

that the worker does not exist for the sake of economic products, but that conversely they exist for his sake. This "exists" must mean "ought to exist," for according to Marx it is precisely not so. And this very moral principle expresses the idea of humanity that has worked its way forward in modern times, particularly through the discussions of the eighteenth century. Here again one of the significant thoughts of the nineteenth century proves to be a working out and application of the thoughts of its predecessors. Whereas Kant applied his moral principle in particular against serfdom, it was by Marx directed against the social and economic dependence of the workers, which still persisted despite the proclamation of personal freedom.

What according to Marx was to bring on the catastrophe was the concentration of capital in a few hands, and at the same time the increasing distress among the working population. The prophecy in these two respects cannot be said to have come true. And to this is added what experience shows, that the value of the product of labor rests not merely on the labor it has cost, but also on the use there is for it, and which neither the worker, the capitalists nor the state controls. Finally experience also shows that personal genius and energetic initiative are of such essential significance for production, both in the material and in the spiritual domain, that the material worker can no more be said to be the real cause of the yield than the bellows-treader could be said to be the real cause of organ music. On such experiences empirical socialism lays the main weight, particularly in the face of the question whether collective production in the individual domains can take the place of individual production. It lays weight on the experiments in this direction being made first in smaller circles, thus in the communes, before they are made in the larger. It seeks above all to improve the hygienic, domestic and intellectual standard of living of the workers. It begins from below, while speculative socialism begins from above. It is characteristic that while Marxism stems from Germany, where the idea of the state in theory and in practice stands exalted above the ideals and initiatives of the free society of culture, empirical socialism is at home especially in England. The very expression "empirical socialism" is due to Sidney and Beatrice Webb. The conception this expression denotes is, moreover, not very different from that which Stuart Mill in his time maintained, *[97]* when he e.g. declared that we know as yet neither what free self-activity in its highest form can accomplish, nor what a carried-through socialization of all relations of production would be able to bring about. And he sees (as he has especially stated in his Autobiography) that there is an inner connection between these two sides of the problem. True individual freedom for all becomes possible only through far-reaching

social reforms, which can give the individuals such training and instruction that they can come to use their natural faculties on an equal footing with others. But on the other hand freedom and spiritual development are not merely results of social conditions, but are themselves a condition for social development to become possible and lead to the right goal. Herein lies at the same time a constant reciprocal relation between spiritual and material culture. The sting, the constantly working sting in the social problem, lies precisely in the contrast between the individual and the social and in the contrast between spiritual and material culture. There will here always make itself felt an irrational relation, however many intermediate links are found.

Socialist ideas did not, however, come to be all-ruling within the working class. Already earlier in the century there had arisen an individualist reaction against socialism in the so-called anarchism. The word anarchism was used by Proudhon in its original, negative meaning "absence of all dominion." There can well be connection between men without compulsion and without sovereign power. What leads the anarchist into community with other men is partly the need to be helped by them, partly the need to help them. In men like Proudhon and Kropotkin this side of anarchism stood in the first rank. They laid particular weight on life in the narrower societies, where neighborliness already develops a feeling of community and the "mutual aid" which Kropotkin in his interesting writing "Mutual Aid" 1902 set in sharp contrast to the state's regulation of all relations, supported by might. But there were anarchists whose whole life went into struggle with all authority in the world, in whatever form it then appeared. Bakunin was a type of this sort of anarchists. He fought first the old state society, the corruptness of which his experiences in Russia had opened his eyes to, but later he fought no less energetically organized socialism and Karl Marx. To an even higher degree than Marxism he had to content himself,
[98] as regards the future, with indefinite hints of what was to come after the chaos he wished to bring about.

In France there appeared toward the close of the century the so-called syndicalism, a social philosophy that more than any other social theory has developed within the circle of the workers themselves, though philosophers by profession for a time joined it. Syndicat is the French name for craft union. Various syndicats in the same town join together into a labor exchange (bourse de travail); syndicalists of the same trade in a district into a fédération régionale; the various regional associations have in turn formed a Conféderation nationale (1895), and the various labor exchanges have finally joined together with the national confederation into the Confédération générale du

travail (1902). Within these associations the theory of syndicalism has developed. The most important representative of it is the worker Ferdinand Pelloutier, who has developed it in several writings. (In a treatise "Le Syndicalisme revolutionnaire" Challaye in "Revue de Métaphysique et de Morale," 1907, has given an interesting exposition of the theory of syndicalism. Besides revolutionary syndicalism there is also a Syndicalisme reformiste and a Syndicalisme jaune, which in this connection have less interest).

What binds the syndicalists together is the common interest of the trade. What is aimed at is the establishment of free workshops, where personal sense of duty and joy in work take the place of the masters' authority and create a mutual sympathy between the individuals that makes all compulsion superfluous. Not a mechanical necessity, as Marx believed, but free labor itself brings forth the new society within which the right distribution of the yield can take place, as the state never could bring it about. A society of free men can, according to Pelloutier, be viable only through an education that goes on in the moral, the administrative and the technical domain alike. Admittedly most workers do not yet possess the economic insight which is the only sure guide for the workers' associations, but Pelloutier hopes that through the labor exchanges experience will be gathered and an intellectual sense provided which in due time can enable the just sovereignty of labor to replace capital in the management of human interests. The philosopher Sorel, who for a time joined the syndicalists, expressed this thus (in a certain connection with Bergson), that there would develop an intuition concerning social ends and means, and that by the instinctive, riddles *[99]* could be solved which modern understanding, isolated from all immediate need and feeling, sought in vain to guess.

In the motives to which it refers, and in the ideals it sets up, syndicalism is of a positive character. The critique of the existing society it borrows from socialism. But it disagrees with the latter in that concepts like state and nation are wholly rejected. No historical development is recognized, for there is no difference between the wage laborer of recent times and the serfs and slaves of earlier times. Democracy is rejected because it mixes different classes together in struggle for common political ends. There are to be in general no political parties any more, not even any socialist party (which indeed even harbors millionaires in its midst). Syndicalists in general will not take part in politics, since all politics must amount to a provisional recognition of the existing society.

If one now asks about means and ways to make this free, ideal society possible,

the syndicalist theory presents two peculiarities.

In contrast to democracy the syndicalists insist that it cannot do to wait until a fully conscious majority joins the new ideas. Pelloutier, who has been called the father of syndicalism, admits, as we have seen, that most workers do not yet have the economic insight that is required to be able to take a stand from reasoned conviction. Therefore a small circle of intellectually developed syndicalists must take the lead, an elite, which acts on behalf of the multitude and for its good. What is aimed at will be for the good of all workers, also for the "yellow" syndicalists, who regard peaceful cooperation with the employers as possible. Such a new aristocracy is necessary, because one must act quickly; the right moment for demonstrations and strikes must be seized. Therefore syndicalism is also an enemy of arbitration, which leads to drawing out the time by negotiations and formalities, and which in the end demands a vote of the whole multitude. The leaders must of course have the multitude with them; but it can be won by brisk action in an assembly where voting is by a show of hands and in enthusiasm, while secret individual voting dissolves solidarity and easily lets the individual in his solitude forget what he owes to the whole class. In contrast to parliamentary negotiation about new laws and to peaceful negotiation with employers, direct action is set —

[100] (action directe) in various forms, such as street demonstrations, work stoppages, destruction of machines (sabotage), boycotting of workshops and shops, and finally, as the last great means: the general strike. A general cessation of all work is to be sufficient to put through everything one desires. By this economic, not political revolution the old social order will vanish at a single stroke and the new justice take its place, with happiness and freedom for all. — The philosopher Sorel, who for a time joined Syndicalism, regarded the general strike as a myth, whose significance lay in giving the imagination a great picture of a catastrophe that opens the glorious realization of the great ideals. But the workers themselves hardly understand it so; it exerts its alluring and attracting power and can easily come to push all other striving and activity aside, just as (to use a comparison suggested by Challaye) the faith of the first Christians in the near coming of Christ proved stronger than the interest in family life, culture and the life of the state. —

Here we are concerned merely with Syndicalism as a theory, and it is easy to see the inner contradictions from which it suffers. There may lie in it the possibility of a tyranny in the ancient sense, in which a single intelligent leader rules with the

involuntary adherence of the great mass. And how the use of force could then be excluded is not easy to see. The old state will, in one form or another, only not the democratic one, stick its head out again. At any rate, a great work of education is presupposed on the part of the leaders toward the mass, a work that makes great demands on the patience, the capacity to wait, which the Syndicalists expressly disclaim. And no less contradiction than between the free leaders and the passive multitude is there between Syndicalism's ethical ideal of joy in work and fellow-feeling on the one hand, and the sharp and destructive means to which appeal is finally made, on the other hand. Will it be possible to return to quiet, uniform work after sabotage and general strike? Will the new society stand there spontaneously when the work of destruction is completed? —

These questions had naturally to present themselves in a purely theoretical way. It lies outside our task to speak of how the idea of Syndicalism has worked in the chaos which the end of the World War called forth in large parts of Europe. In wise words the English labor leader Arthur Henderson has said how the war has accustomed the peoples to thoughts of violence and made it natural for the great masses to apply force in order to reach their goals by short cuts, and how it will especially be men of *[101]* uncertain temperament and impatient mind who will attempt to go such ways. Only history will one day be able to show what role ideas that already appeared in the last decades of the 19th century have played in the events that — as this account is being concluded — have not yet completed their course. Then it will perhaps also become clear how ideas that had their home in France could suddenly pop up in the Slavic, Magyar and Germanic world. —

The 19th century's thoughts on the social question have passed through a series of phases, from the conservatism of the historical school and the Hegelian doctrine of the state, through the faith of Liberalism in the harmony of interests and the faith of Socialism in the state as economic leader, to the free workshops of Syndicalism, led by a labor aristocracy. Yet the word "pass through" is not apt. For there is no doubt that all these different points of view are still nourished and maintained, even if it is in silence. At any rate they have all set their stamp on the course of development. It must be left to those who have the gift of prophecy to say how the social problem will present itself when there is again time and quiet for factual discussion and for the honest work in the individual circles of society that must always form the solid foundation for further development, in whatever direction this may then go.

4. *The Principle of Nationality.*

Social life takes shape in every single people in a peculiar way, even if the social problem everywhere appears with certain general features. And the consciousness of such peculiarities has in the 19th century found expression with greater force than in earlier times. Besides the various other names one can give it, one could also with justice call it the century of nationality. Never has national feeling intervened so strongly in the course of events as here. There may perhaps in earlier times have stirred a more violent instinctive rage at violations of common laws, common gods, a common ruling house. But under ordinary conditions the instinct did not account to itself for its origin or its right. Conquests could therefore be carried through comparatively easily, or by other ways, e.g. by princely marriages, a union of different nationalities be effected, without any stronger and more lasting resistance being
[102] offered. One had no clear consciousness of what danger might thereby be brought upon the individual people, its language, its memories, its whole way of taking life. Observers as different as Bluntschli (Politik als Wissenschaft. 1876) and Bryce (Studies in History and Jurisprudence. 1901) have, on the contrary, declared that the idea of nationality in the 19th century has had greater influence on the life of the state than in any earlier time. If we seek the grounds for this, they lie in various circumstances.

True culture is present only where the demand made on human capacities agrees with the peculiar nature of human beings, and especially when these demands spring from this very nature in immediate interaction with the conditions of life. This holds for the individual, and it holds also for peoples. Rousseau's critique of modern culture was grounded precisely in the consideration that for most people it had been transferred from outside or from above, not sprung from self-activity or at least won by independent appropriation. He especially protested against the idea that culture could without more ado be transferred from one country to another. It is characteristic of him that when he received from Poland the naive request to write the country a constitution, he answered that if he had lived ten years in the country, he might perhaps write its history, but a new constitution for it he could not have written even then. What Rousseau here said holds for all sides of culture. Foreign influence is not thereby excluded; but what is foreign must first be tested and appropriated, cannot without more ado gain admittance, and it works best when it serves to awaken the people's own powers. Even translations succeed best when they are re-creations. The significance of language one becomes conscious of altogether only gradually, as

development proceeds. The presupposition will be that there is not merely a need for a spiritual content, but also for this content to find expression by the same means that one involuntarily uses to give vent to one's experiences and to communicate them to others. Language struggles play a great role in the nationality struggles of recent times. It is felt as an impediment and an insult when it is made impossible to use the mode of expression that involuntarily lies nearest, and by which the difference between thought and word becomes for the individual the smallest possible.

Together with culture and language there operates local belonging together, neighborliness. It has asserted itself at all times, among the nomadic hordes as in the Greek cities. But under the conditions of earlier times there often arose isolation and a limitation of the feeling of belonging together to circles that were far narrower than the people as a whole. A Danish author who has examined the difference between *[103]* peasant life formerly and now shows how the feeling of belonging together was naturally and remained limited in earlier days, especially in remote regions. One did not see beyond one's own fields, or, at the most, beyond one's own parish. There was no view of the larger society, of people and state (H. F. Fejlberg: Dansk Bondeliv, saaledes som det i Mands Minde førtes, særlig i Vestjylland. 1889). The isolation and the limitation were removed by better means of transport, by increasing enlightenment and by participation in political life. Free constitutions brought the right and duty to take part in deciding the great decisions about the people's conditions of life, so that these no longer simply came to stand as inexplicable fates. Thereby the feeling of solidarity and community was developed. Common hopes and common fears can arise, consciousness of a common soil, common memories, common fates.

Besides such conditions determined by the people's inner development, the struggles through which the peoples of Europe in the first part of the century had to assert their existence have also been of great importance, in that they brought about both a firmer cohesion inwardly and a sharp common opposition outwardly. The feeling of brotherhood which the Revolution awakened in the French people found expression in the Marseillaise's call to "Enfants de la Patrie", just as the feeling toward foreign attack found its expression in the summons "Aux armes, citoyens!" And when the wars of the Revolution and the Empire led far beyond the right of self-defense and brought with them the oppression of other peoples, a corresponding feeling was thereby awakened in those who had not at first hand taken part in making the Revolution. It became Napoleon's Nemesis that he, who had been borne forth by the wave of the French Revolution and of national feeling, himself fell by reason of

his contempt for the freedom and nationality of other peoples. Later too it has been shown that a national breakthrough can so dominate and blind the mind that one does not discover that other peoples too have a need for unity and freedom. Just as the individual human being's drive of self-preservation can develop into an egoism that knows no consideration, so national feeling can lead to national egoism. And with this there is often joined a sentimental self-contemplation, an enjoyment of one's own supposed excellence.

In the case of Germany, the feeling of nationality that developed under Napoleon's tyranny found a great and beautiful expression in Fichte's "Reden an die deutsche Nation" (1808). These addresses, which were delivered in Berlin while the city was
[104] still occupied by a French army corps, may be regarded as a principal work in the philosophy of nationality. The same thinker who a few years before had characterized the preceding century strongly and penetratingly has also said a decisive word on the feeling of nationality, which was to play so great a role in the new century.

Fichte begins by asking whether there still exists at all a German people, and whether its continued existence deserves, if so, to be secured. After the Peace of Tilsit the German people is cut off from every independent action outwardly. The victor determines its policy and decides how large an army it may keep. There are now perhaps those to whom it will be most agreeable to make themselves slaves and to put up with the deprivation of freedom. And there are no doubt also those who feel admiration for the conqueror's genius, for his superiority, for the mighty power his thought can set in motion. But it will be most worthy to maintain inner freedom, now that outer freedom is lost. And above all it is a matter of holding fast to the true standard of what is great and noble, and not letting oneself be dazzled by mere power. True greatness must now as before be ascribed only to those who foster ideas that lead the peoples forward, — and over the living let us leave the future to judge!

The conqueror has thought only of outward oppression. Intellectual life, and especially the education of the young, he has in his arrogance left unheeded. In this, the freest domain, there is still work to be done. And the right foundation for a pedagogy that can serve the development and consolidation of the independence of spirit and character has been given by Pestalozzi. — Fichte then, following Pestalozzi, the German-Swiss reformer of education, gives his ideas on a national pedagogy. —

The hope that along this path a future may come for the German people Fichte grounds on this, that this people has since time immemorial dwelt on its own soil and spoken its old language. And then it is a people from which men such as Luther, Kant

and Pestalozzi have come forth, men whose whole direction of spirit bears witness to a deep sense of originality, inwardness and personality!

A people, Fichte maintains, is never wholly expressed in the state that it forms. People and fatherland extend beyond the state in the narrower sense of this word. What makes the individual a member of his people never becomes wholly the object of his own clear consciousness. Through invisible threads he is bound to that which also forms the ultimate foundation of the people's rise and existence, — the divine source of all life. No political order can let this inner coherence come into its full *[105]* right; the state is only the social order that secures right and peace and makes trade and handicraft possible; it is only means and condition for the spiritual content that lives in the people and conditions the feeling for the fatherland. A universal state is impossible, because it would not let the innermost peculiarity of the individual peoples, as it expresses itself in spiritual life and language, come to its full right. It is a divine law that the essence of humanity can come to revelation only in a wealth of individual and national forms. Therefore it is a contemptible consolation for the loss of one's own nationality that can be sought in being absorbed in a universal state. —

Yet it was not these thoughts that for the time being became decisive for the conception of the relation between people and state, not even in Fichte's own fatherland. The reaction after the Revolution and after the Napoleonic era put what was historically handed down in the first rank, forgetting the living forces that had in their time produced what was now tradition. It was the heyday of the "historical school". All present-day movements stood as insignificant in comparison with the legacy of the forefathers. In conceptual form this line of thought was developed in Hegel's "Philosophie des Rechts" (1821), which throughout the whole century, and beyond it, came to stand as the German conception of the relation between people and state. Fichte's great thoughts, which had come into being in a time of need, were forgotten, like the promises that the princes of Germany had given of popular freedom when the struggle against the foreign conqueror had been carried to its end. When in 1824, ten years after Fichte's death, a new edition of the Addresses to the German Nation was contemplated, it was forbidden by the censorship. But when in the second decade of the 20th century a new world war had brought new distress upon Germany, then Fichte's addresses were cited by the Imperial Chancellor from the rostrum of the German Reichstag.

Hegel saw in the historically developed state a work of a thousand years of labor, a labor in which the single individuals and peoples with or against their knowledge

and will have taken part, and by which there has been produced a world order before which all individual interests and ideals pale. A higher power has worked through the human passions in the course of history; the world spirit has used the conscious aims of historical persons as means and ways for something that lay beyond their horizon. It is God's march in the world that expresses itself in the existence of the state. In the state the individuals now find their tasks, which are determined by their position within it. They need not work out by speculation what their duty is, still less
[106] that they should have any right to make their supposed "Besserwissen" count. For Hegel, as once for Hobbes, the state is a mortal god (mortalis deus). And it is not a mere ideal of a state that Hegel is thinking of here. In the preface to the "Philisophie des Rechts" there occurs precisely the famous proposition that what is rational is also actual, and what is actual is also rational. In the state — and especially in the Prussian state — Hegel saw a rational reality or the realized reason.

Hegel nevertheless finds a difference between his concept of the state and the ancient one in that he lets individual freedom and conviction come to recognition. The modern state is precisely to be the organization of freedom. The freedom of the individual has its sphere of action within the state and under its laws. And the state cannot reach its goal without the adherence of the single individuals and of civil society, which through trade and industry procures satisfaction for the economic needs. But this adherence must be regarded as given once for all, and it cannot be taken up for renewed discussion. There can not even be any talk of a faith in the state among the single individuals; for faith presupposes that there is a relation of opposition which must constantly be overcome, whereas the whole being of the individual is — insofar as it has any justification at all — once for all a member of the state and takes part in its life. Where this complete unity does not prevail, the individual stands, however much he may appeal to his good conscience, on the brink of evil.

The people can be recognized only as organized in the state. But then the people as state is also the highest power on earth. That this power is in fact exercised by the bureaucracy is in Hegel's eyes no objection: "es sollen die Wissenden regieren!" — That in the July Revolution in France and in the agitation for the English Reform Bill there stirred elements in the peoples who did not think themselves to have come into their rights in the modern state did not trouble Hegel. His last work before his death (1831) was a critique of the English reform bill. What people in the West European countries were now working for, that, the philosopher held, had long since been

attained in his fatherland, and in a more perfect form!

Hegel's theory of the state made itself felt in the course of the century not only among philosophers, but also among jurists and historians, especially of course in Germany. In his great work "Das Selfgovernment in England" (1860) Gneist regarded the whole recent social and political development, especially in England, as a great process of dissolution, fostered by the fact that civil (economic) society has pressed *[107]* into the state and wants to use its power for its interests. Quite in Hegel's spirit he teaches that "what the strife between duties and impulses means in the life of the individual, that means in the life of peoples the eternal struggle between state and society". — Beforehand, then, right is to be on the side of the state when civil society appears with its demands for a reorganization of the state, because the involuntary and unforeseeable development of life is no longer satisfied within its framework! Yet it is precisely through labor for material culture that the people's most elementary forces stir and its practical thoughts develop, and if the state is not to hover over the working society without regard to it, and thereby in the end become powerless, it must try to give these forces room within its framework as active members. It is in that direction the West European ideas of the state point. How far state organization of the free forces can go is, as we have seen, still an open question. — In German historiography the conception maintained by Hegel appears, as we have seen, in the aim which the Prussian historical school sets for historical inquiry, in that it declares the state to be the proper subject of history and will include the history of culture only insofar as it acquires significance for the state.

Even if it were possible to make material cultural work a mere means for the state, it will not succeed with regard to spiritual cultural work. Already in the former the need and capacity for independent activity and for striking out on new paths will resist absolute systematizing, — that maintained by Marx as well as that maintained by Hegel. But spiritual culture cannot, according to its whole essence, be made a mere means. Language, e.g., goes its own ways, and in vain will the power of the state at the present day hinder a subjugated people from using its language. Fichte already in his time pointed to language as the expression of a people's peculiarity and as withdrawn from a conqueror's dominion. Since his time conquering powers have nevertheless held that the unity of the state requires a unity of language carried through by compulsion, — a progress in brutality in comparison with the Napoleonic age. — What holds of language holds of all spiritual culture. It must be national, insofar as it must lay claim to all inner forces, also to those through which the individual

is connected with his people and his race. The national character of culture has therefore inner, not outer grounds. Sentimental national feeling sometimes demands that art shall set itself national tasks, draw its subjects from the people's nature, life
[108] and history. But art must itself set its own tasks, and it has its own immediate relation to life. If its tasks are solved with originality and passion, the artist's nationality will also involuntarily show itself; it will express itself most healthily and most deeply the less the artist himself thinks of it. Julius Lange has aptly expressed this relation thus: "The condition for outstanding and thorough art rests more on the nation's learning to enter into the peculiar tasks of art than on the demand that art shall enter into those of the nation". (Sergel og Thorvaldsen. 1886). Far from the national significance of art being diminished by this consideration, it becomes precisely greater and deeper. In peculiar contrast to Gneist's conception of the state, developed in Hegel's footsteps, stands the view which the Swiss scholar Jacob Burckhardt has put forward in his "Weltgeschichtliche Betrachtungen", whose first draft dates from the years around 1870, while the book first appeared in 1905, after the author's death. Burckhardt was in the enviable situation of belonging to a small people and yet of having a world language for his mother tongue. As belonging to a small people and as a historian of culture he naturally arrives at a different point of view from the legal philosophers and historians of a great power. He saw clearly that the concept of the state in the 19th century has been placed in a crisis, which is called forth by the question whether the state is to determine the direction of culture, or culture that of the life of the state. That this problem has first arisen in the 19th century he derives from the fact that culture has only then reached such a development that it can strive to take the state into its service. We see throughout the free society of culture grow at the expense of the state and at the same time demand of the latter what it is not itself able to do. All culture cannot be left to the free forces, since they may work unsteadily and one-sidedly; but the condition for beneficial influence here on the part of the state is that the independence of culture be recognized. Burckhardt is against the cult of the state, its unity and its power, which quite naturally develops in great states. It will in the long run be at the expense of culture. It is by no means only among those in power that the lust for power develops such a cult; it is also among individuals, in that their self-esteem is satisfied by belonging to something great. —

The relation between state and culture is again one of the great problems which the 19th century leaves to its successors. And by reason of the tension that at the transition to the new century prevailed between the great states among themselves,

as well as within each of them, the problem presents itself more sharply than before. The World War will perhaps through its outcome and through its side effects lead to *[109]* a new phase in the interminable history of the great problem. —

But however it may go with the relation between nation and state, the principle of nationality will not vanish and will perhaps even outlive the principle of the state, in that it stands in a closer relation to the involuntarily working forces in the world than the principle of the state does, so true is it that the content of life is more important and more original than the forms of life.

An eminent French sociologist, Émile Durkheim, has (at the philosophical congress in Bologna 1911) singled out as the value-creating (and at the same time consciousness-of-value-creating) times such times when human beings for one reason or another are brought closer to one another, are led to express their thoughts about common conditions and thereby become conscious of common aims. These are the great periods of fermentation, in which life is lived with special intensity, and in which individuals forget their particular interests in face of the great currents that sweep all along with them. These are the times fundamental for social life, which are later commemorated in national and religious festivals and customs. Even if the mood of such great moments is not preserved when one returns to the tasks of daily life and the interests of private life, they will nevertheless not vanish without a trace. They are at any rate symptoms, and that which makes itself known in them may later emerge under other, perhaps unforeseeable forms. — What the French sociologist points to here throws light on the development of national feeling, but at the same time presupposes that blind urge, mere instinct, no longer prevails. Mighty and sweeping events may pass over a people without a clear consciousness forming of the common values around which one gathers. Ideas must be able to form both of what one possesses and of what one desires, in order for national feeling to come into being. — Already earlier Bryce (American Commonwealth. 1885) had put forward a similar view to Durkheim's. He found it characteristic of the Americans that, in spite of all apparent preoccupation with individual interests, they in serious moments push everything aside for that which socially and politically is the one thing decisive. Most of those who speak about the Americans take account only of their business life and their preoccupation with it. But in the decisive moments the idealism that dwells in them reveals itself. — Bryce has here pointed to the opposition which in psychology is called the opposition between disposition and emotion, and to the importance of observing human beings in both states. In disposition what may be

[110] hidden and potentially present, in emotion steps forth in full clarity and actuality. In and by itself, to be able to be seized by strong emotion when one stands before great and significant events is a good testimony, and Kant, who otherwise had difficulty in looking brightly on human beings, was within his right when, in the enthusiasm which the French Revolution awakened, even where the expression of this enthusiasm was bound up with danger, he saw a testimony that human nature, in spite of "the radical evil" (propensity to sensuality and egoism), harbored good and noble elements in it. It is naturally a task for the psychologist and the historian to find the bond and the interaction between disposition and emotion; only then can he rely on the testimony that lies in this latter.

The testimony to which Kant pointed, the enthusiasm for the French Revolution, pointed beyond the limitation that may lie in national feeling. When culture comes to consciousness of its value, independent of all factors of power, there will arise the idea of a society beyond the boundaries determined by nationality and state. Already at the close of classical antiquity such a thought was present. It was especially Stoic philosophy that developed ideas of a universal human society; Plato had prepared the way for it by demanding a pan-Hellenic consciousness, a feeling of humanity, which was to prevent the Hellenic states from treating one another as barbarians. In the Christian church the universally human consciousness assumed a religious character, and the science, art and humanity of modern times brought new points of view and a new foundation for it. In the 19th century an international community begins to assert itself in the case of the industrial workers, and Marx in his Communist call turned to the proletarians of all lands to unite. Both material and ideal culture make it possible that a group which within one people has joined together around a common aim can feel itself most closely related to a group within another people that has formed around a similar aim. If one imagines this carried through in all domains of culture, one approaches the thought that the time of nationalities might be past. Practical difficulties, however, arise on several sides against this. With state socialism the disappearance of nationalities cannot be reconciled. Marx appealed confidently to the proletarians of all lands. He believed in the harmony among the well-understood interests of all proletarians. But when the state is to organize labor, the opposition between the different states will assert itself, in that the economic interests of one
[111] country cannot without more ado be reconciled with those of the others. It is not merely with regard to the circulation of goods that this question emerges. It presents itself also as far as the workers themselves are concerned. Are Polish workers to be

allowed to undercut the workers of the Nordic countries, or Chinese workers the American, the Italian the Swiss? The economic oppositions that existed between the old states, and which there often, if not always, lay at the root of the wars, will not have vanished between the new, socialist states of the future. And according to Marx national feeling is in the end occasioned (like every other ideal feeling) by economic interest. The ambiguous position of the Social Democratic parties during a world war finds its explanation herein. According to Hegel, whose concept of the state Marx has taken over (only with the change that the relation between state and economic society is reversed), the states are "absolutely independent totalities", which can indeed enter into agreements with one another, but always stand above these agreements, so that in relation to one another they are in the state of nature. — Syndicalism, which wants to abolish the concept of the state entirely, is here more consistent than Socialism. There will be easier forms of intercourse and interaction between the free societies of culture that are to replace the states than between the "absolutely independent totalities". And with the centralization to which state socialism pays homage there follows naturally, perhaps unavoidably, a certain feeling of power and an isolation of the interests of the individual country. A feeling of power stirs, as Burckhardt rightly has seen, not only in the leaders, but also in private persons in a great state.

The inequality in culture which conditions the immigration of workers from countries with the lowest wages or with fewer needs and demands poses a new problem. How is a country with supposedly higher culture to place itself toward a country with supposedly lower culture? Is it merely to depend on the power which a country with "higher" culture may possess? Or will one in the future have the great pedagogical patience that lets the peoples whose culture is still at what Europeans call lower stages follow their own natural development, provided only that care is taken to keep external hindrances away? Hitherto the peoples of Europe have not followed this procedure, not even toward one another. It has essentially been the relation of power that has been decisive, and nations with fewer soldiers and cannon have been declared "underweight" ("minderwertig"). Toward the peoples of other parts of the world, whom by European standards one might call "primitive", no respect for human beings has been shown. Religiously they have been regarded as material for conversion, commercially as subjects for exploitation and militarily as objects for *[112]* conquest. Here lies a problem which in the 19th century was touched on by a few authors (very energetically by Herbert Spencer), but which has not found any solution in principle. It remains to be seen whether the "League of Nations" contemplated by

the world peace can take up the question in earnest. —

It is material culture and its tasks that Socialism and Syndicalism especially have in view, and it is indeed here that the shoe first and foremost pinches. But, as already indicated, behind the demand for wages and what it sets in motion there stirs more and more a need for participation in ideal culture. And it is here that the last and greatest resistance will be made against the obliteration of nationalities. For here one notices especially that an element of life would fall away with them. Language and memories, life of feeling and cast of thought make their involuntary claims felt, and spiritual works would with the disappearance of national relations lose a great part of their peculiar timbre. If it is said to this that spiritual culture is accessible only to a few, this holds certainly of the full understanding of the greatest works, especially at their appearance as something new for the age. Art and science are born in solitude. But it is a social and national work that they signify; the artist and the man of science are as it were the people's chosen scouts, who at their lonely posts are to greet the new that is breaking forth. Art and science follow their own laws, which do not without more ado favor accessibility on the part of large, unprepared circles. But it is then precisely the task of a peculiar art, a distinctive sagacity, to find intermediate links and intermediate forms through which the new can become generally accessible, so that the self-activity without which no ideal culture is true can be awakened. Own experiences and moods, one's own involuntary mental work must be met with that which is communicated from outside. The task must not be solved by dragging down what stands higher, but by finding in the primitive, unprepared sense germs of a striving after truth and beauty and releasing it, a striving which in all its meanness can be akin to the spiritual forces that produce the greatest works. In scientific respect there will here be use for what is called a "noble popularization", which gives the most important results of investigations in such a way that a labor of thought is thereby called forth in the readers. In artistic respect people have taken up the idea of a close connection of art and labor, so that labor itself can be practiced as an art. And it has
[113] been thought that for the future socially organized society architecture, music and drama will become the most important fine arts. On the other hand, people are so optimistic as to think that the time of the novels will be past, as there will be a lack of material! (Morris and Bax: Socialism, its growth and its outcome. 1893). —

In an effort in the direction here indicated it will be a matter of getting removed the practical dissatisfaction that hampers the sense for what the nation has in store of ideal culture. The French philosophical world has had a clear eye for this. In an interesting

discussion in the French philosophical society (1907) it was debated whether and how it was possible to awaken understanding of and love for nationality in working-class circles. Various speakers who had moved in such circles, especially in Syndicalist circles, had had the experience that it was impossible to get anywhere by way of discussion when one wanted to convince a Syndicalist worker of the significance of national culture. The sociologist Bouglé expressed this by saying that he had often found in Syndicalist circles that he and his opponents did not agree in any evaluative judgment (jugement de valeur). The workers felt themselves "desolidarized", and they had more interest in foreign events and endeavors than in those at home, when these did not particularly concern their own conditions. In this philosophical circle there was agreement that the only way to go was to get the existing state to satisfy, to a far higher degree than hitherto, the demands of justice in all relations: Le patriotisme ne peut se maintenir que par un réformisme décidé.

III. RELIGION

I. THE RENAISSANCE OF FAITH IN AUTHORITY.

In the religious domain the opposition to the 18th century is far greater than in *[114]* other spiritual domains. The revolutionary movement in France within literature and politics and the great humanistic Renaissance in Germany had pushed religious questions into the background, indeed might seem about to shove them entirely out of the realm of spiritual interests. Free inquiry and free conscience had been proclaimed as guiding stars, and among the proclaimers were great personalities, some of the greatest of mankind, highly superior to those who maintained that human life would dissolve into bestiality if the rules of thinking and acting were not laid down by superhuman authorities.

But, as was already remarked at the beginning of this account, precisely the 18th century's most important men in the century of thinking and poetry pointed beyond what in the broad circles must be said to be the distinguishing mark of the 18th century, a dryness and sobriety in the course of thought, an overvaluation of the understanding at the expense of feeling and imagination. The Romantic need, the need for fullness of content and for being absorbed in great and captivating conceptions, which stirred at the beginning of the century, benefited religion too. Religion was recognized as

poetry before it was recognized as authority. In the Romantic spiritual tendency poetry, science and religion were in the end to be one. The development in the first decades of the century is marked by the fact that religion breaks out of this harmony and in ever sharper forms resumes its old points of view. In the religious domain, as in the social, the oppositions are sharpened in the course of the century. After the great apostasy there was felt a violent need to bow again to supernatural powers as ruling over everything in life. The principle of authority awakens to new life. In
[115] French literature De Maistre is the most important spokesman for this tendency. He pointed with full right to the fact that "the syllogism, the scaffold and the epigram" — the 18th century's three chief weapons — had proved powerless against the need for absolute support and refuge. The power of the Church had asserted itself in secret. And besides — De Maistre maintained — the terrible times one had lived through had furnished proof that human reason has no power to guide life. It is of no use to appeal to science. The so-called laws of natural science are mere dogmas and do not teach us to know the real causes. Only a divine will can be the true cause of what happens in the world. And to find out what is right and good, human reason is not sufficient. To solve this task there is required a spiritual authority which only the Catholic Church possesses, and which presupposes infallibility in the ruler of this Church. (Du Pape. 1820). In the following period De Maistre's line of thought is continued under various nuances by a series of gifted spokesmen for the ever more powerful Catholicism in France. The new constitution after 1830 was used to demand elbow room for the Catholic faith. "We are" — said Montalembert in the Chamber of Peers — "the sons of the Crusaders, and we will not yield to the sons of Voltaire". Lacordaire worked for the revival of monasticism. Whereas even under the Restoration no monk's habit had shown itself on the public street, Lacordaire appeared publicly in his Dominican habit, even at a minister's table and in the National Assembly in 1848. The times had changed; in the first years after 1830 clergymen had been able to visit the dying in the hospitals only in civil dress.

Whereas De Maistre gave his principle of authority political, intellectual and religious significance alike, John Henry Newman, the spokesman for the principle of authority in England, was a purely religious figure. From his youth he had felt ever more strongly the Anglican Church's wavering between authority and freedom, and it finally came to stand clear to him that it had failed in its task, because it had not the courage to assert its divine authority, although it strictly maintained its unbroken continuity with the original Church. It was in England not, as in France, an external

revolution that one had to combat; but the line of thought of the 18th century had in many ways penetrated into the Church itself, supported by its Protestant character. What Newman attacked first and foremost was the right to follow one's own personal conviction (private judgment). The consequence of this must be skepticism. And how then can remedy be had for the anguish that has so deep a root in human nature? Only *[116]* the Church is capable of this, and capable of it only by virtue of the holy authority on which it builds. "The Church", says Newman (Apologia pro vita sua. Being a history of his religious opinions. 1865), "has the task of delivering human nature from its misery by lifting it up onto a higher foundation. The Church recognizes human nature in its real, moral loftiness, in spite of its degradation; but it cannot free it from the earth except by raising it to Heaven. To this end a re-creating grace is laid in its hands". And in order that the Church may administer this gift of grace, it must possess absolute authority. — In the "Apologia pro vita sua", one of the most remarkable books of the 19th century, Newman describes how the necessity of absolute authority step by step dawned on him amid heavy inner struggles. As so often the real decision had in fact been made long before he with full consciousness undertook the transition to the Catholic Church (October 8, 1845); it has probably been said with right of him that from childhood he was a Catholic by instinct. For him there was in the end only a choice between Catholicism and atheism. The middle way (via media) that the Anglican Church, and Protestantism generally, would go was for him a wrong road. As early as 1841, thus four years before his transition, he designates Lutherans and Calvinists as heretics. Of interest for the history of religion is the fact that the living expectation of Christ's second coming was a main point in his religiosity. Christianity, he says somewhere, ever since it came into the world, has always been on the point of going out of it again. The great expectation that gives primitive Christianity its stamp must always live in the Church — "else the New Testament is not written for us!" And Newman found in the monk and the nun the only ones who strictly followed the commandment to have one's treasure in heaven. This he expressed already in his Protestant time. — In Germany and in the North the countermovement against the 18th century's Rationalism came in the form of a return to the old Lutheranism.

The Holstein pastor Claus Harms issued on the three-hundredth anniversary (1817) of the beginning of the Reformation 95 theses, the same number as Luther's. But whereas Luther had spoken against papal power and indulgence, Harms spoke against reason and conscience. He found the beginning of Rationalism in the distinction Calixtus had introduced in the 17th century between dogmatics and ethics. Thereby

[117] the throne was set up before conscience, and later on Kant let it be ascended by his doctrine of the self-legislation of conscience, which made it independent of faith. One must choose between the Bible and reason; the so-called rational faith is either bereft of reason or of religion or of both. —

Even before Harms appeared, Grundtvig, who from Rationalism and Romanticism through hard struggle of soul had been led back to the old faith of the Church, had rejected the independence of science — toward H. C. Ørsted the independence of philosophy and natural science, toward Chr. Molbech the independence of historical inquiry. He demanded that all inquiry should bow to the word of the Bible. But he later became doubtful about the scholars' investigating, by the way of science, the origin of the biblical books and the manner in which they must be interpreted. An independent opinion about these things requires a learning which not every layman can acquire. He sought then another authority than that of the written word. He could not conceive that it had been God's meaning "to bind the faith of the unlearned to the testimony of the learned". And he found then (1825) in the apostolic creed, which from ancient times is heard at baptism, the right norm for the Church's faith as well as for the interpretation of the Bible. Here there was a testimony accessible to all, and which could stand firm, whatever results the learned might arrive at in their investigations of the authenticity and interpretation of the Bible. The creed stood in close connection with the Church's cult, and in what Grundtvig called his discovery there expresses itself a sense for what the history of religion shows to be fundamental for all positive religion, — the close connection between cult on the one side, myth, legend and dogma on the other side. —

It was thus the same principle in different forms that people in the Catholic and the Protestant world appealed to. Whether authority is to be sought with the Pope, in the Bible or in the creed, it demands obedience and submission of all one's own thought and feeling. In the course of the century the opposition between the different confessions emerged ever more sharply. There was still at the beginning of the century good and cordial understanding between Catholic and Protestant clergy; even Jewish clergy were counted as colleagues. Here there still operated the long-prevailing rationalistic line of thought, for which confessional differences were in the end insignificant. Later in the century it became otherwise, especially on the part of the Catholic Church. A Catholic bishop in Switzerland thus declared that the Catholic
[118] Church cannot exercise any tolerance toward Protestants, for it is, after all, the only true Church, outside which no one can be saved; the Protestants, on the other hand,

are obliged to exercise tolerance toward the Catholics, for the Protestant Church dare not claim to be the only true Church. —

In the Catholic Church, however, the principle of authority did not come to stand alone. A passionate or emotional need for absolute support in life and faith was for the leaders of the Catholic Church not a sufficient foundation to build on. It was too personal and too subjective a stage. The decision about the value of faith in authority for life would then be left to the single individuals! For the time being one gladly made use of the support that authors like De Maistre could give in awakening the need for a firm foundation; but one wanted this foundation to be built up with rational theology. Renan's teacher at the theological seminary of St. Sulpice said to him, when they read De Maistre together: "Ah, comme on voit bien, mon cher, que M. de Maistre n'est pas théologien!" It was and is not enough for Catholicism that reason is taken captive under the Church's doctrine as under a paradox at which it basically takes offense. Reason is by the way of thinking itself to be compelled to recognize the Church's doctrine. One is not to begin with faith, but with reason; for by what other way than that of reason could one demonstrate that faith is right? One therefore does not put up with it that reason's capacity to prove the existence of God is denied. Once this proof is carried out, theology can build further, in that it infers that the God thus proved must have revealed himself in a reliable manner, and that this revelation is present in the Church's doctrine and through the Church as organ becomes the share of each individual. The Catholic Church rejects decisively the more recent philosophy's treatment of the problem of knowledge and in opposition to it goes back to the Scholasticism of the Middle Ages. Thomas Aquinas is set over against Kant. It was the grand-scale Catholic thinking of the 13th century that people renewed — or rather: tried to repeat. Whereas within Catholicism there had earlier prevailed a certain freedom in the philosophical respect, so long as the dogmas themselves were not touched, it now became otherwise. In the "Syllabus errorum" issued by Pius IX in 1864 the principles of scholastic philosophy were declared to accord with the interest and progress of science, at the same time as the view was condemned that moral doctrine and philosophy might be cultivated without regard to supernatural revelation and ecclesiastical authority. In the "Vaticanum" (1870), by which the Pope's infallibility was established as dogma, those were anathematized who denied that the existence of the true God can be proved from human reason, as well as those who thought that *[119]* one could come to faith by the way of personal experience and feeling. Leo XIII, who already as a Cardinal had proposed that Thomas Aquinas, doctor angelicus, should

be the patron of the universities, declared in 1879 his philosophy ("Thomism") to be the best philosophy. And later, under Pius X, there was condemned in a papal bull (1907) the so-called Modernism, which wanted to introduce a psychological-historical method into theology and to base faith on experiences that perhaps were not even had with full consciousness. The bull, which is a very interesting document and gives a thorough and expert characterization of the modern methods of psychology of religion and history of religion which it rejects, finds the cause of the heresies that show themselves in the use of these methods in spiritual corruption, untimely curiosity, arrogance and ignorance. As means against this it names the subordination of all science to Thomism and a prohibition against Catholic students' attending lectures on philosophy at other than Catholic universities.

The Catholic Church is thus not afraid to make "the faith of the unlearned dependent on the testimony of the learned." From laymen it demands only childlike and undeveloped faith (fides implicita) that the Church possesses the gift of grace of truth. But this position it then maintains through sharp and firm rejection of the intellectual striving and spiritual demands of the age. In the course of the century a whole series of Catholic thinkers have been condemned, now because they gave reason too much influence, now because they gave it too little influence. Abbé Bautain thus had to recant his doctrine that reason could not prove the existence of God. According to the Vaticanum it is a matter of faith that such a proof can be given. It is a two-edged sword that the Catholic Church has here armed itself with, in that a critique of the sanctioned proofs must lead to doubt about the Church's authority. About his theological period of study at St. Sulpice Ernest Renan says in his memoirs of youth: "Sous le couvert de réfutations faibles, tout l'ensemble des idées modernes venait à nous. —

So consistent a return to the stage of earlier times Protestantism was not able to carry through, to say nothing of daring to ascribe to the Church authority to establish new dogmas, as the Catholic Church did twice in the course of the century (Mary's immaculate conception 1854 and the Pope's infallibility 1870). Nevertheless the Protestant Church exerted itself to maintain the concept of the Church, its cult and its tradition as standing above all individual striving and conviction. But it became
[120] ever more difficult for the Protestant Church to explain on what this authority really rested. It was not able with decisive authority to interpret its own cult and doctrine. On this rest both the strength and the weakness of Protestantism. It is strong when it rests on the self-acquired conviction of free personalities; but it will always fall short when it is a matter of setting up a systematic concept of the Church. It would not

be of great interest for cultural history to follow the Protestant Church's concept of authority through the different forms and degrees in which it has been maintained in the course of the century. It is, on the other hand, of great interest to see what motives on the whole operated in the return to positive religion and Church that characterizes the first half of the 19th century. These motives come forth, by the nature of the case, most clearly and strongly within Protestantism.

First of all it must be noted that the general characterization one can give of a century does not without more ado hold for all strata and all circles, to say nothing of all individuals. There live at every time great masses of human beings who are very little touched by what for a historical view gives a time its stamp. Even in the century of "the Enlightenment" many lived in quiet in the old faith and stepped forth only in a warding-off manner when the new thoughts became too pressing, and it was then no wonder that the old thoughts came up again when the movements of the time subsided. The changes which these old thoughts have undergone in the meantime and later undergo by meeting the new circle of thoughts within which they emerge again, were not always the object of clear consciousness.

In the very circles that were animated by "the Enlightenment", there must naturally come a certain lassitude or weariness and with it a need for nourishment or movement of another kind. Where the Enlightenment was more than a passive fashion, it demanded exertion, active use of the faculty of thinking, constant self-activity. There was then gradually engendered a need for relaxation, for rest in the simple and unadorned, for devotion to forms that one did not need to produce at the same moment that one had need of them, — for going by ways that did not first have to be cleared. And such forms and ways were in ecclesiastical religion laid ready through the experiences of centuries. "The faith of our fathers" stood then as an inheritance one could enter upon without more ado, not a capital one first had to produce.

Besides, it was, as Rousseau had already maintained in the midst of the Age of Enlightenment, a very one-sided culture that the 18th century represented. There *[121]* were deep spiritual needs that did not come into their own, especially the need for immediate living in imagination and feeling, for following one's longing in its free course, unconcerned about all manner of criticism. The great labor of thought that had already been accomplished, and which was continued by the century's greatest spirits, had not yet exerted its effects on the dark strata of mental life, had not been deposited in the life of feeling and will, and had therefore not yet become full personal property. Such a penetration takes time, and it occurs essentially by indirect ways.

With this it is connected that the Enlightenment of the 18th century had a character of aristocracy of spirit; it was, and wished only to be, accessible to a small circle. But the Revolution had called forth a new social stratification, and besides, the strong flaring up of national feeling had awakened a need for community, for sharing the spiritual life of one's people. There stirred a growing need for forms of spiritual life which — in a literal or figurative sense — could be common to all. All were to have access to the highest spiritual life. Now, as we have heard, the demand was made that the faith of the unlearned should not be dependent on the testimony of the learned in the most important matters of life. And ecclesiastical faith and cult seemed to satisfy this demand.

Finally, the so-called Enlightenment had an abstract and at the same time a dogmatic character. It built on a series of general principles that were regarded as secure results of thinking and science. But it turned out that these principles, even where they were correct, needed closer carrying through and confirmation. And the 19th century was precisely, if the characterization given in the foregoing is correct, the century of carrying through and of confirmation by experience. Its natural science, its historical and philosophical inquiry had the chief significance in the particular of confirming and limiting what the preceding centuries had initiated. But it now turned out that a distinction had to be made between the ideal of knowledge and the knowledge actually won, and that it was still a long way to the time — if it should ever come — when life could be conducted on thoughts that were fully carried through and tested through. The question of knowledge and faith turned out to be more complex than people had thought.

All this had to bring it about that people stood differently toward the spiritual inheritance of the past than before. They needed it, understood it better and had better spiritual room for it. The Romantic movement worked here together with the
[122] religious reaction. Poetic and historical sense and personal need for support and refuge worked for a time hand in hand.

It had, in the case of Protestantism at least, not merely been outside and against the Church, but also within the Church, that the Enlightenment (Rationalism) ruled, and the history of the Church in the first decades of the century is the history of Rationalism's successive retreat. An excellent church historian, Karl Hase, who was far from belonging to the orthodox, has in his time (Theologische Streitschriften. 1834) shown that the Rationalism which had penetrated into the Church and long ruled there met resistance in the new century on three different grounds. — It lacked

historical sense. It wanted to put its inferences of reason in place of the peculiar forms in which spiritual life has clothed itself in the course of history. Every age has its natural and popular ways of expressing its highest truths, and where there is a sense for the original, for that which really issues from life, one will not try to put self-made, abstract forms in their place. — In the second place Rationalism proceeded from the idea that one can act on feeling only through the understanding, and it shrank from the purely involuntary outbursts of religious feeling and from the images in which it found expression. — And in the third place Rationalism understood by "reason" really only common sense, as it had developed in an age that regarded itself as educated and enlightened. Every age has its common sense, which rests on the experiences it has had or believes it has had, on the traditions it takes for good wares, and on the scientific results that are accessible to it. Common sense can never be the highest judge. It must be tested by the highest scientific insight the age has at its disposal, and in this respect ecclesiastical Rationalism had settled down much too early. —

If we now look at what position religion, after the struggle with Rationalism, takes up in the spiritual life of the century, two main points will emerge. The one concerns religion's relation to culture, the other the psychological foundation of religion itself.

There were times when religion was the highest, indeed the only measure of value. It then determined the place of every spiritual or material striving within the world of spirit. Spiritual life was judged by its relation to the ideals and interests of religion. This is, even after religion's awakening to new life and new recognition, no longer so. It is now conversely religion whose value is measured by its significance for a rich and deep spiritual life, by a standard that is not given with religion itself, but *[123]* is drawn from what, according to the testimony of experience, promotes unity and fullness, inwardness and depth in the minds of human beings. It has become one element among many, and even where one puts this element in the seat of honor, the standard is drawn from the connection among all elements, not from this particular element alone.

That religion has at all become an essential element in the spiritual life of large circles, after it for a time seemed about to be eliminated from this, is due to a personal need, in relation to which the content of religion plays a subordinate role. If one examines religious discussions from the 19th century, one will notice how this personal, subjective moment gives the whole its timbre. Even where the principle of authority (whether it is represented by Pope, by Bible or by creed) is stressed with force, the main motive is the need for support and refuge. Religion has, as Pius X

rightly saw in the bull against Modernism, become pragmatic. It is by no means essentially objective grounds that condition man's faith. Comte is certainly right that when we no longer believe in Apollo and Diana, it is not because the existence of these gods has been refuted, but because there no longer stirs any need to believe in such gods. Throughout the whole history of religion it is in the end a mental need that is the foundation of religion; but this foundation lies hidden under the overwhelming and captivating power of the content of faith. It is precisely characteristic of the 19th century that the foundation is consciously drawn forth and used as an argument. It is a turn in the whole position of the religious problem which Rousseau and Kant had prepared in the 18th century. We therefore see also that clear-sighted religious thinkers in the first place stress honesty and integrity in the religious respect, warn against supposing oneself in possession of a faith that is not in reality grounded in a living need. The center of gravity has decidedly shifted from what is objectively, historically given to the innermost part of personality itself. We shall have occasion to return to this point. —

Old and new always collide with special force in the religious domain, and the reappearance of religion did not take place without sharp frictions both in public life and in narrower circles. The renewal of the old faith often assumed forms which for those who had grown up in the spiritual sphere that the humanism of the 18th century had formed might well arouse offense and concern. In the year 1799 Schleiermacher
[124] had published his book "Über die Religion. Reden an die Gebildeten unter ihren Verächtern". When in the year 1821 he issued the third edition he declared in the preface: "The times have changed so strikingly that the persons to whom these addresses are directed no longer seem to exist at all. When one now looks around among the cultured, one would far rather find it necessary to write addresses to mopers and slaves to the letter, to ignorant and uncharitably condemning superstitious people." In a similar direction H. C. Ørsted expressed himself in a university address (1826), where he alluded to "certain proud and harsh men of our time, who in the name of Christianity break the staff over the 18th century's boldly inquiring men." The philosopher Rudolf Haym tells in his autobiography that his father, a rationalistic teacher, saw him with concern choose the study of theology. "Some coarse word from the orthodox camp must have roused his anger. If I knew, he then said, that you would some day come over in that direction, I would rather see you dead." — Toward the end of the century it was conversely orthodox fathers who with concern saw their sons walk — in their grandfathers' footsteps.

2. *Philosophy and Religion.*

As philosophy's representatives toward religion there stand in the first third of the century Hegel and Schleiermacher. They both seek to show that religion, especially Christianity, is an essential and indispensable component of the human spiritual life. But the ways by which they arrive at this result are different.

It was, as we have seen, Hegel's conviction that the actual and the rational are one. Toward religion, as it has historically developed, he therefore seeks to take up a standpoint that is raised above the opposition between Orthodoxy, which holds to the literal reality of what dogma teaches and cult would express, and Rationalism, which puts its supposed reason in place of the historically developed doctrine of faith. Orthodoxy does not see that the literal expressions and formulas are more or less figurative, and it does not examine what spiritual significance they have in a deeper appropriation. And Rationalism applies a prosaic, intellectual consideration to the living spiritual content that religion has to offer; it places itself in a purely external relation to this. "Now it is," says Hegel (Philosophie der Religion. Einleitung), "certainly not the business of philosophy to lead a man to religion. .... He whose heart has not reached beyond all finite being, — who has not raised himself above *[125]* himself in longing and presentiment or in a feeling of the Eternal, has not cast a glance into the pure ether of the soul, — he does not know the subject that philosophy here wants to comprehend." What philosophy has to do with is, according to Hegel, religion's relation to the whole remaining conception of the world of man. The religious problem arises from the fact that there may be an opposition present here. Hegel demands here, as in the doctrine of the state, that philosophy shall enter into the historically given, into what reality offers, and here this is positive religion. If he does so, he will — of this Hegel is convinced — find that what lives and breathes in religion is the same as what lives and breathes in true philosophy. Man has not needed to wait for philosophy in order to find truth; it is already given in religion. But it is given there in the figurative language of imagination, and philosophy cannot stay with the figurative form thus created. The content must be translated into thought's own language. It is peculiar to imagination that it views as different things what yet belong intimately together. It forms, namely, an image for each single member of the whole that is basically what it wants to express. Thus it represents God to itself first as Father, then as Son, and then as Spirit, and yet the meaning is that there is only one God. It is furthermore peculiar to imagination that it views as a historical

event taking place at a given time and in a given place what is basically an eternal truth, valid at all times and in all places. Church theology presents it as an event that God created the world, and as another event or series of events that he became man, suffered and died. But for philosophy it is an eternal truth that the Eternal and Infinite reveals itself in and through a finite world, and that it can therefore reach fulfillment only through impairment and downfall. Despite this difference between religion's imaginative and philosophy's conceptual language, the content is nevertheless the same. It is the task of philosophy to justify religion from the thinking consciousness. Childlike piety does not need such a justification; it takes truth on authority and feels satisfied and reconciled in its faith. Only in the face of doubt and critique is a justification by thought necessary. But even if religion and philosophy, faith and knowledge, can be reconciled, this reconciliation holds precisely only for the thinking consciousness. If the people no longer rest securely in faith in the truth of religion,
[126] and if it cannot attain to a philosophical understanding, — why, then there is a split in the spiritual life. And Hegel concludes his presentation of the philosophy of religion with the declaration that how our age is to find its way out of this split, that one must leave to it itself; philosophy has nothing to do with this practical task. Hegel thus saw, what has as a rule been overlooked, a constant thorn in the problem, despite the harmony he has proclaimed. —

Schleiermacher's standpoint in the philosophy of religion is determined by his course of development. He was brought up in the educational institutions of the Moravian Brethren and was later strongly influenced by Kant's philosophy. An extraordinarily rich and deep personal life was in him combined with the sharpest critique, a critique that exercised its force both toward the historical and the philosophical foundation of theology. It was the side of feeling in religion that he laid weight on first and foremost. Only that can have religious significance for him which appeals to feeling. But the conceptions in which feeling, in times of devotion and rapture, procures expression for itself, reflection must afterwards test. Reflection seeks to follow the oscillations of feeling and to cut away everything that is not an immediate and necessary expression of the real experiences of the inner life. Schleiermacher had learned from Kant that we can form no well-grounded thoughts beyond possible experience. Religious conceptions, formulated as dogmas, have then only the justification of being expressions of what is experienced in the religious life of feeling; it is then a matter of drawing the boundary between dogmas in this sense of the word and mythological fantasies, which go far beyond and outside the immediately

experienced. In this distinction Schleiermacher saw theology's proper task. In his already mentioned "Reden über die Religion" (1799) and in his "Der christliche Glaube" (1821) he has developed this conception. The concept of God is for him the thought that corresponds to the feeling of absolute dependence, which is the characteristic mark of religion at its culmination. The thought of Christ as redeemer and exemplar corresponds in the same way to the feeling of peace and reconciliation that participation in Christian congregational life brings about. But from such thoughts no theoretical inferences can be drawn; they can acquire only symbolic significance.

Hegel too basically conceived all dogmas as symbolic. For Hegel's as well as for Schleiermacher's philosophy of religion there had to arise the question whether the practical consciousness can let itself be content with a symbolic expression of truth instead of the complete solution of the riddles of life that religion in its classical times had given or at any rate promised. As we have seen, it is Hegel's last word in *[127]* his philosophy of religion that this question remains standing. It also emerges even among those who do not know what philosophy is. Where does the figurative in religion begin, and where does the literal cease? From the side of the Church no clear answer to this has been given. There is, however, hardly any question that many people who adhere to the Church in reality embrace the symbolic conception. Hegel and Schleiermacher have, without knowing and willing it, set the century one of its most important problems.

Common to the two thinkers who gave Romanticism its most clarified expression was the belief in a harmony of the oppositions that life presents. A younger contemporary of theirs, Arthur Schopenhauer, stepped into sharp opposition to them by putting disharmony in the first rank. Inner experiences and outer observations had early made him feel life's contradictions and pain. In the innermost of everything living, and in the end of all existence, he found a never satisfied, painful striving, a "will to live", which never found rest. Therefore all attempts to demonstrate the harmony of existence, whether they appeared in philosophical or in religious form, aroused his indignation and his scorn. When with zeal and enthusiasm he immersed himself in the source writings of the great religions, it was their emphasis on life's anguish, sin and pain that captivated him. He admired primitive Christianity by reason of its opposition to natural human life, and he scorned modern Christianity, which thought itself its continuation. But most he admired Vedanta and Buddhism, and as the highest there stood before him the complete abolition of life's blind, restless urge, the annihilation of "the will to live", which Buddha had called Nirvana. No

positive expression can designate the state that is thereby attained, and which lies beyond every possible experience; but it is not therefore to be equated with sheer nothing; no more than that which lies beyond every possible knowledge becomes nothing because it cannot be known. It is nothing only for him who regards the world of the senses as one and all. But it is only a few who attain the full abolition of the will to live, and Schopenhauer was well aware that he did not belong to them. He regarded it as the task of his life to open the eyes to the abysses and to the heights between which life moves, and which the prevailing optimism does not let us catch sight of. For his own part it was the aesthetic-intellectual way of taking life that helped him beyond its unrest. His thoughts exercised in the second half of the century
[128] great influence in wide circles. They express a basic theme in Richard Wagner's great art, and they gave Friedrich Nietzsche the problem that became the fate of his life through a convulsive attempt to overcome pessimism in its innermost root. By his clear and brilliant style Schopenhauer became accessible to larger circles than Hegel and Schleiermacher, and he became fashionable. His significance lies in the fact that he drew attention to other sides of the religious problem than those usually noted. And he was aware that the relation between philosophy and life is more complex than people thought in the Romantic period. His relation to Buddhism had a counterpart in Kierkegaard's relation to primitive Christianity.

3. *History of Religion and Psychology of Religion.*

Romantic philosophy of religion had already set itself the task of examining religion in its relation to the human spiritual life. But although it often by a stroke of genius cast light on individual elements in the nature of religious consciousness, it had nevertheless not been able to make it emerge in its whole composite essence. Hegel proceeded from religion as fully complete, with systematic dogmatics and developed cult; it was for him in this shape a reality whose rationality was to be demonstrated. The difference of form that he found between religion and science was in his eyes unessential, although he conceded that for non-philosophers it might be very essential, perhaps insurmountable. Schleiermacher and Schopenhauer went more into the practical and complex character of religion, and their contribution to its psychology is of lasting significance; but they did not pay sufficient attention to the historical character of religion. In the course of the century people have sought to remedy this one-sidedness through an objective, historical study of the religions

as actually given spiritual phenomena. The science of language gave here the solid foundation, and for the first time the great religions of the peoples now came to be present in their characteristic peculiarity and in their historical connection. The history of religion became a distinct science, which applied the same method as all other historical inquiry. Every religion is regarded in relation to its time and to its material and spiritual culture, and through comparison between the different religions one seeks to find the mental elements and tendencies that mark the peculiarity of religious phenomena in relation to other spiritual phenomena. It then turns out that *[129]* besides the historical connection, which assigns each single religion its determinate place, there are also certain basic motives, which in different degrees and forms again and again recur in all religions from the lowest to the highest.

Whereas people were agreed that the lower religions' own account of their origin could not count as real history, the matter stood differently in many people's eyes with the biblical books' account of the origin of Christianity. Rationalists and Supernaturalists had been agreed that here there was real history; their disagreement concerned only whether the events that were presented were of a supernatural character, or whether the accounts of them could be interpreted so that the miraculous disappeared. Into this dispute David Strauss intervened with his book "Leben Jesu" (1835). In the choice that the Orthodox maintained, when the talk was of biblical accounts, that they must namely be either historically correct or invented, Strauss finds a false dilemma. Historical events are always reported in such a way that the narrator's presuppositions, moods, wishes, and ideals determine both the choice of what is communicated and the light in which what is communicated is seen. The New Testament authors were guided by faith in an expected Messiah; Jesus made on them — or on their informants — such an impression that they saw in him the one who was to come and bring the consummation of all things. An account in which events are involuntarily interpreted through conceptions and moods in the narrator is called a myth or a legend. Supernaturalism is then in the wrong when it takes the account of Jesus as literal history, and Rationalism is in the wrong when it explains away the supernatural in an artificial, often smugly prosaic manner. Both parties overlook religious imagination's capacity and need to form myths and legends. If it is asked what we then know about Jesus of Nazareth, the answer was: we know what effect he had on the people who stood near him, and from whom the accounts of him derive, perhaps through several intermediate links. It is "the Christ of faith" we know, not "the Jesus of history", — thus Strauss later expresses (Der Christus des

Glaubens und der Jesus der Geschichte. 1865) his conception. Besides the emphasis on the concept of myth against the Orthodox's prosaic literalism and the Rationalists' prosaic reinterpretation, Strauss has the merit of emphasizing that the founder of Christianity saw himself as the one with whom a new, supernatural world order was to take effect. It is the expectation of the last things (Eschatology) that is the basic
[130] thought in Jesus' proclamation and marks his position in the history of religion. It is to this main point that the most recent historical inquiry too has come around, after the so-called liberal theology had made a series of attempts to present Jesus as a prophet of humanity, an ethical exemplar. The eschatological conception of Jesus as the one who through mighty visions announces himself as the founder of a new, supernatural kingdom, which was already near, at the point of immediate breakthrough, has also the advantage that from it one can understand the New Testament ethic in its direction toward the one thing needful, in face of which all purely human relations become indifferent, insofar as they are not hindrances. One understands that he who put the commandment of love at the head of his ethic also had to enjoin that it might become necessary to hate one's nearest, when the relation to them hindered the full devotion to the Great that was to come.

Whereas in earlier times the problem of Christianity stood as a metaphysical problem, in that it was asked how God could become man, it now approaches more and more to being a psychological problem, in that it is asked how he who in his addresses and parables set forth the mild and consoling thoughts and proclaims the ethic of humility and love can be the same who in mighty visions sees himself as the one who is to come on the clouds of heaven as judge of the world and savior of the world. The paradox passes over into becoming a psychological problem. Whether this is insoluble cannot be examined here. I shall only remark that it is in and by itself not incomprehensible that precisely he who leads his life and finds his task under the shelter of great visions and in living expectation can feel pity and inward compassion for human beings, especially when an inward and loving mind stands as the best condition for being able to concentrate on the one thing needful. But it also becomes clear that of human tasks in the long run, beyond the life of the single individual and of the contemporary generation, there can be no talk. The primitive Christian ethic could not acquire any positive relation to the great labor of culture that has been the nerve of human development in the following times.

The discussion of the problem of primitive Christianity continues unabated. Orthodox theology has not left the field. But from its side too it is recognized more

and more that the problem, viewed purely historically, collects around that psychological question. It is a vindication of Strauss in his grave that it is admitted from very opposite sides that he nailed down the decisive point. Later investigations have, *[131]* even though in many respects they shared his points of view, at several points had to dissociate themselves from him. He undertook no thorough investigation of the origin of the individual New Testament books. He himself recognized that this investigation was first properly taken up by F. C. Baur, the founder of the so-called Tübingen school. This school has set up, constructed according to its opponents' assertion, a hypothesis which historical critique has since abandoned. But the Tübingen school has with energy spoken up for the application of general historical method to the question of Christianity's origin and first development. Thus Baur says (Die Tübingerschule und ihre Stellung zur Gegenwart. 1859): "Christianity is once and for all a historical phenomenon, and as such it must put up with being regarded and investigated historically. It: appears in a historical connection, which it can in no way deny ..... How can one know what it is, how it arose and entered into the world, except by going back to the ways by which it was introduced and prepared, to the causes that cooperated in its origin, and then from all these moments together explaining its origin and essence, so far as that is at all possible." — The Tübingen school's solution of the problem has no doubt been abandoned by most. But scientifically viewed the task still stands firm of understanding Christianity as a member of the whole historical development. In the end there is only a single historical method, and if one does not follow it, one does not get history in the scientific sense of the word.

As to method, there has for other religions been no doubt in this respect. The study that has been applied to historical elucidation of the different religions has been extraordinarily instructive. An essential side of the human spiritual life has hereby been illuminated. Tylor, Frazer and Durkheim have cast light on the primitive religions, Burnouf and Oldenberg on the Indian religion, Erwin Rhode on the Greek, Goldzieher on the Muhammadan, — to name only a few individual names. The historical sense, which is one of the peculiarities of the 19th century, has found here an exceedingly important application. We are led beyond mere polemic and criticism, to say nothing of mockery and scorn, and are led into directions of life and thought that would be wholly incomprehensible if one stood before them as fully complete systems, but which become comprehensible when one sees them in their development and in relation to what otherwise stirs in human life. Of special importance for the understanding of the development of religions has been the elucidation of the relation *[132]*

between cult, legend and dogma. Sometimes, as in the worship of the Madonna, legend can lead to cult, and cult in turn (by virtue of the presupposition that one can worship only one who is of supernatural origin) to dogma. Or cult can itself be the immediate source of dogmas, as when in the Brahma doctrine the need and longing that lead to cult itself becomes the highest god. Or cult can call forth legend, as in the mythical explanations of why human sacrifices were replaced by animal sacrifices. One of the most important results of research in the history of religion is this, that cult — however it may have arisen — is the central thing in all positive religion. It can even be said to be a definition of positive religion that it finds expression in a determinate cult, around which legends and dogmas gather. Cult stands as a firm point of departure, exerting its power over all who take part in it. Dogmas can be refuted, cult not; it exists or it does not exist. Through the power it exerts, it is the most important foundation for the existence of religion. Many who cannot reconcile themselves with a religion's dogmas, and perhaps still less with the sermons that are built upon them, find enrichment and peace in taking part in cult. Whether it can be justified to speak of religion where cult is either not practiced or is regarded as symbolic action is a question that leads over from history of religion to psychology of religion.

The boundary between historical and psychological investigation of religion is not easy to draw once for all. The historian must be psychologist, and the psychologist must here be historian. This latter needs no further explanation. As for the former, it is often overlooked, and the history of religion thinks itself strictly scientific when it holds to the dogmas, legends and forms of cult present at each time and in each place. But the real significance of these religious phenomena can be discovered only when one goes back to what stirs in the minds of the people who take part in cult, listen to the legends and believe in the dogmas. One must go back from the objective to the subjective; one must seek to determine in what the religious value of the given forms consists. At the same time the historian of religion cannot avoid making a certain evaluation of the religions in relation to one another, or of the different stages of development of the same religion in their mutual relation. When a religion or a stage of development of a religion is called higher or lower in relation to other religions or phases, there is thereby presupposed a standard, about whose justification questions must be asked.

[133] Schleiermacher was already engaged in a psychological investigation of the foundation of religion in the human mental life, and his reference to the feeling of depen-

dence is of lasting significance, although it needs closer determination, especially because dependence presupposes that there is something one wills or strives after, something to which one attributes value, and whose attainment meets with obstacles. Schopenhauer had already emphasized the element of will, and later Ludwig Feuerbach maintained feeling, need and wish not merely as the psychological foundation of religion but as the causes that produce religion. While he has very little respect for the dogmas, he has great sympathy with the mental foundation in fear and hope, longing and need, from which they ultimately spring. In religion man beholds his wishes and hopes as fully realized. Hence one can study in the different religions the most secret striving of the human heart in its manifold forms. It is, after all, this foundation that bears life outside religion as well, and that stirs in us all. (Wesen des Christentums 1841. — Theogonie 1857).

The difference between the free-thinkers of the nineteenth and those of the eighteenth century shows itself clearly when one compares Feuerbach with Voltaire. Feuerbach is more radical in his outlook than Voltaire, but has a sympathy with the foundation of religion that Voltaire, who regarded religion only from the intellectual side, could not have. At the same time Feuerbach stood toward religion as the natural scientist toward nature; he is intent on explaining the religious phenomena by means of causes that prove to be constantly at work in the human mental life. Just as Lyell explained the geological processes of the past by forces that are at work in nature to this day, Feuerbach seeks to find the key to the understanding of religion in forces that psychological experience constantly demonstrates. The dogmatic element in Feuerbach appears when he flatly asserts that all theology is psychology. That is as unwarranted as it would be, at the present stage of research, flatly to say that physiology is nothing but physics and chemistry. But just as modern physiology recognizes no other manner of explaining organic phenomena than to trace them back to physical and chemical laws, so there is for the science of religion no other method than the psychological-historical one, without our being able for that reason to assert in advance that everything can be explained in that way. Feuerbach's method is, moreover, abstractly psychological and often unhistorical. The great period of development of the history of religion also lies after his time. —

Right at the turn of the century the American William James applied the stand- *[134]*
points of the newer psychology to the understanding of religious phenomena, having laid particular stress on what works in us without entering across the threshold of consciousness. (Varieties of religious experience. A study in human nature. 1902).

James has paid special attention to sudden and seemingly unmotivated changes in the mental life; it is especially in such cases that it shows itself, in his view, that what he calls "the ultramarginal", that which lies beyond the margin of consciousness (margin), can be a source from which new and perhaps higher directions in the mental life well up. Under religion James counts every emotion that becomes of significance for our full reckoning with life and with what it has brought us, and that at the same time brings unity and concentration into our being. — It is the pragmatic tendency in epistemology that here finds a counterpart in the psychology of religion, which is all the more natural since pragmatism has on the whole the significance of illuminating the problem of knowledge from a psychological standpoint. A complete philosophy of religion will include not merely a psychological investigation of religious topics but also an epistemological and an ethical investigation, since the relation of religion to science and to morality will at all times be a main point in its characterization. James goes very little into this point. In my Religionsfilosofi, which appeared the year before James's book, I have sought to bring out all three standpoints that can here be in question. The philosophy of religion has no special method but is an application of epistemological, psychological and ethical standpoints to the religious problem.

The more the philosophy of religion distances itself from dogmatic theology, the more it gives up every attempt to ground the content of religious faith, and its main topic becomes the psychological motives that in the past and present have sustained, and in the future may be assumed to sustain, religion (in a narrower or a wider sense). On the philosophical side one has often held solely to the negative side, to the unknowability of the religious content, the scientific impossibility of grounding the validity of religious representations. Herbert Spencer distinguished between science and religion, so that the object of the former was the knowable, of the latter the unknowable, and he saw the essential in religion in its acknowledgment that what underlies all and moves in all is a mystery, an acknowledgment he found increasing in determinateness as one passes from the lower religions to the higher.
[135] (First Principles. 1861. — Ecclesiastical Institutions. 1885). For such a conception Spencer's friend the physiologist Huxley coined the designation agnosticism (doctrine of non-knowledge), because every presentable doctrine about such things had to be designated by a word ending in -ism. Spencer, however, asserts an all too external relation between the unknowable that is supposed to underlie all and the existence we know, and he overlooks the conditionedness of the religious feeling by definite wishes and interests, which are not satisfied by the mere knowledge that there is a mystery.

Comte's English disciple Frederic Harrison maintained, in opposition to Spencer, that religion presupposes an object of reverence, and like his master he found this object in humanity. (Harrison's cult of humanity has later been presented at length in his "Creed of a Layman". 1907). To this it must be remarked, however, that what can make humanity an object of reverence is that in the course of its historical development it has fostered the spiritual and material goods that make life valuable for us; hence we feel the best we know to be conditioned by its continued existence and development. But this existence and development are in turn conditioned by the course of nature constantly bringing with it the possibility of a development in the direction of the ideals that are occasioned by human feeling of value, — a direction that is hoped to continue beyond the point where our ideals have either been attained or have shown themselves limited and provisional. In the widest sense religion must have not merely a humanistic but also a cosmological character. —

Theology as such cannot attribute decisive significance to historical and psychological standpoints. It must always proceed from a definite religion as the true one, and it thereby has a standard that excludes the universal character that a historical psychological outlook can acquire. As we have seen, various paths point to cult as the central element in the positive religions, and every theology must in the end become an attempt to justify a certain cult. But it becomes more and more difficult for theologians who have any contact with the scientific development of recent times to meet the demands that the congregation, i.e. the circle that gathers around a certain cult, makes. A modern theologian, Troeltsch, has aptly said that the church can neither do without theology nor put up with it. The church must have a coherent doctrine, but every attempt in this direction contains a danger of reinterpretation or of consequences that lead beyond the ideas bound to the cult. It is a fine insight that expresses itself in Schleiermacher's proposition that "no dogmatic proposition has its ground in another, but every single such proposition must be found by contemplating *[136]* the Christian self-consciousness." Merely by being brought into logical connection with one another the propositions may come to stand differently from when they are drawn each by itself from life's own experience; the psychological totality that a man's faith must always to a certain degree constitute will be more or less different from the logical totality that reflection could build up from the single components of the content of his faith. Changes will occur still more readily when one tries to bring the dogmas into connection with thoughts that have their origin in quite other domains than the religious. And yet in the long run there can be no complete opposition, nor

a mere relation of indifference, between religious representations and the thoughts that men form in the course of life and in the work of scientific understanding of life. A religious problem arises when a circle of such thoughts has formed, and when the relation between this circle and the circle of the religious representations presses for clear determination. The difference between churchly laymen and scientific theologians will essentially rest on this, that the former do not have the need, which the latter must have, to find logical connection between the single members of the content of faith and to find a certain connection between the content of faith and the rest of the intellectual content that is at one's disposal. Now it is precisely laymen who in the course of the century have come to play a greater role in the life of the church. The church has become more democratic; that was, as we have seen above, a condition of its renewed life. This entails a decentralization, against which Pius X in his bull mentioned above protested, particularly when it was sought to make the laymen a factor of progress. For the time being the laymen nevertheless stand as a good support for the church. A Catholic theologian, the former Imperial Chancellor von Hertling, has thus stated that our century has called laymen to the defense of Christianity in a manner that was not known in earlier times. This movement leads, in any case for the time being, to a sharpening of orthodoxy. It is easier to hold fast to the letter than to enter into the relation between image and thought. But the support that laymen can give becomes at the same time a control, and the situation becomes, especially in Protestantism, which has no fixed concept of authority, more and more this, that it is not the proclaimers who come with message and instruction that are followed, but that it is the laity who decide how the message and the instruction are to sound. The position of theology nowadays rests more on its position toward the laity
[137] than on its position toward science. It is after all also in the end by the experiences that individuals have as to what can sustain them in life's struggle that the future of the religious problem will be conditioned. This leads us over to one of the significant thoughts that the nineteenth century has fostered.

4. THE PRINCIPLE OF PERSONALITY

When the nineteenth century is characterized as the century of confirmation by experience, this characterization holds also for the religious domain. It has shown itself in three different respects. The justification of the religious reaction that marks the age (rhythmically alternating in the course of the century) must be sought in this,

that one turns back to the old faith in order once more to test its carrying capacity, or, as one of the most brilliant spokesmen of the reaction has expressed it: "to read what is Old, Familiar, handed down from the Fathers, through once more, if possible in a more inward manner." It was a matter, in the second place, of determining the place of religion in relation to the spiritual life that has developed independently of religion, and that cannot and will not be sacrificed for it. It was a matter, finally, of investigating the historical and psychological foundation on which religion builds, and on whose continued existence the existence of religion also depends.

But there is yet another very important side on which the said characterization is seen to hold. Eminent spokesmen have pointed in an energetic and brilliant manner to the individual human personality itself — "the single individual" — whose interests and needs religion (whether this word be taken in a wider or in a narrower sense) is to satisfy. Here the real verification takes place in the religious domain. Churchliness and theology, philosophy, history and natural science cannot in and for themselves tell the individual anything about how he — with his nature, his circumstances, his experiences — is to take his stand in religious respects. And no faith, no way of taking life (be it religious or not) has any real value unless it has proceeded from one's own experience of life and corresponds to the personal need awakened through the experience of life. It is the principle of personality that expresses itself herein, and which the nineteenth century has established with greater energy and with clearer consciousness than any of its predecessors. Thomas Carlyle is the best known representative of this line of thought, which was soon proclaimed in his footsteps by his American friend Emerson and independently of him in the Nordic countries by Erik Gustaf Geijer, Frederik Christian Sibbern and Søren Kierkegaard, and then *[138]* toward the end of the century to stream from new sources.

Carlyle turned, after a severe crisis in his inner life, both against the claim of science and against that of the church to determine a man's whole faith. (Sartor Resartus. 1833). Each individual must find his own religion, just as each must find his own task in life. What matters is not confessions and articles of faith but what a man practically believes, perhaps without being conscious of it. What is decisive is what really stirs in a man's mind in face of the existence of which it is a member, but which it is not able to survey or to see through. Traditions and churchly customs contain a great deal that the individual will not be able fully to make his personal property; what matters then is to become clear about what of all this handed-down material one has really appropriated and holds fast in one's faith. Most important

in Carlyle's eyes is the eradication of the dishonesty that prevails in the religious domain, and which led Carlyle in a conversation with Emerson to declare that there was no longer any religion in England. That an end be put to dishonesty is the first condition for the real spiritual values that the past has handed down to be preserved, and for new values to unfold in silence. In silence — for all that is great happens in silence, because its first germ forms deep within the sanctuary of the personal life.

Independently of Carlyle similar thoughts arose in the Swedish historian and philosopher Erik Gustaf Geijer. He had belonged to the Romantic school and had long shared its conservative conception in the religious, the pedagogical and the political domain. But the historical study itself freed him from dependence on the historically handed-down. His "defection" from the Romantic-conservative tendency (1838) was connected with the principle of personality (an expression he created) dawning on him. Some years later (1844) he writes: "Our age has been remarkable more than any other for great changes. Yet that is not what distinguishes it most, but rather this, that these unheard-of changes more distinctly than ever spring from inner causes. It is the inner world that is failing in its foundations, in its faith, its conviction, its knowledge. Our age is an age that suffers from its own thoughts. And if one would seek a name for the basic and mother thought that here is pressing forward and making its way, it is none other than the principle of personality, whose penetration into general political life we have witnessed." And when Geijer some years later (1847), shortly
[139] before his death, casts a glance back at his own life, he declares: "There lies a basic thought in my whole life, which emerges ever more distinctly; it is not my own work, but it has led and guided me right up to this day. Were I to give it a name, it is none other than the much disputed principle of personality, whose prophet I have almost against my will become." Of the application of this principle to the religious domain he says in a letter from 1843: "I am neither a Church Christian nor a Bible Christian, though so much of a Christian that I can find edification both in church and in Bible. Thousands are in the same case as I, — all who cannot be content with a mere faith in authority, but are compelled to build their own religion on the basis of their own experience and reflection. This individual element, which is now the only living thing in religion, points — however scattered it may seem — nevertheless toward a common goal."

Geijer's statements about the individual as the only living thing in religion correspond to Carlyle's declaration that what matters now in religion first and foremost is honesty. Both statements point in the same direction. And Sibbern meets, without

knowing it, the Scottish and the Swedish thinker. His plea for what Geijer called the principle of personality is built not merely on a critique of faith in authority and on a warm feeling for the worth of personality, but (as we have already touched on) on a whole world-view, whose main principle is that all development and all life, spiritual as well as bodily, proceeds from separate points of departure, and that the general and common forms come into being through union and interaction between the sporadically emerging moments. From 1828 on Sibbern is engaged with these thoughts. In university programs from 1846 to 1849 he applied them to the religious and the social domain. According to his conviction a domain in the human spiritual life where general rules do not reach, and where one must await what individual development brings with it. He objects to anything being valid merely because it is asserted and acknowledged in wide circles and formulated in doctrines handed down from generation to generation. And this very common and general element had in its time its first origin in the inner life of single personalities. Everything spiritual that is to come to dominion in the world must go the way of subjectivity, must stir with gripping and captivating power in single individuals. Through mutual conflict between different personalities and tendencies the religious life advances. For the time being every strong and living faith is justified as a forceful outcome of life's inner power.

At about the same time as these statements of Sibbern brought forward here Kierkegaard set up his famous proposition "Subjectivity is truth" (Uvidenskabelig *[140]* Efterskrift. 1846). Truth was for him not an object one could go and behold, not a content given once for all. It comes into being only by being produced and held fast with energy and inwardness. Whether the God to whom a man prays is the true God thus depends on whether the man's mind is honest and earnest or ruled by habit and superficial. He who worships an idol nevertheless prays to the true God when there is honesty and inwardness in the worship. Already as a young man Kierkegaard wrote in his diary: "What good would it do me if I found a so-called objective truth, when for myself and for my life it had no deeper significance." Kierkegaard speaks only of truth of this latter kind, object of what he calls "essential" knowledge. "Inessential" knowledge is that which consists in logic, mathematics, natural history and historical knowledge; all such knowledge has, according to Kierkegaard, no significance for the personal life. As regards religion, he declares, like Carlyle, honesty to be what is first and foremost needed. When in his last great polemic against the official church he was to say what he actually wanted, he answered: "Quite simply, I want integrity." And by

integrity he meant that one becomes conscious of where one stands in the world of spirit, not least in what relation one stands to the great models one acknowledges as one's own, — whether one's own, personal way of taking and conducting life covers the faith one thinks one is building on.

The thoughts mentioned here belong to the middle of the century, to the remarkable years between 1840 and 1850, when so much was being prepared in silence. While Newman in his parsonage fought the last battle to reach Catholicism, Ernest Renan fought his battle in the seminary of St. Sulpice to work his way out of the faith he had brought with him from medieval Brittany. At the same time Geijer, Sibbern and Kierkegaard broke with Romanticism; the harmony it had hitherto brought them now stood before them as a great, perhaps pernicious illusion. Toward the end of the century the principle of personality comes to expression in somewhat different forms, especially as a reaction against the increasing division of labor in the spiritual domain. Emphasis is laid on the immediate and involuntary craving for life and fullness of life, which can never quite find expression and come into its own within any of the rubrics into which spiritual life threatens to be parceled out. Guyau maintains the
[141] involuntary urge to unfold, the overflowing and yet unified energy, in contrast to the special aims to which the practice of life leads one to set, and to the division and limitation that reflection brings with it. A kindred thought has found expression in Bergson's emphasis on instinctive intuition in contrast to analysis and abstraction (Les données immédiates de la conscience. 1888). In Nietzsche the involuntary power and fullness of life are placed above all the forms that art and science command. In his symbolizing thinking he expresses this valuation by setting Apollo above Socrates, but Dionysus above them both.

Whereas for the thinkers who toward the middle of the century worked their way out of Romanticism what mattered was self-reflection, honesty and, as a consequence of this, limitation, for their successors toward the end of the century (Guyau, Nietzsche, Bergson) what mattered was to counteract the mechanization of life with which modern experimental science and philosophical criticism seemed to threaten, and which was favored by the magnificent development of industrial technique. It holds of both groups of thinkers — the anti-Romantic and the anti-realistic — that they draw too sharp a line between personality and science. Science is itself a work of personal labor and bears the stamp of the human spirit. And one cannot distinguish once for all between the knowledge that is of essential significance for the personal life and that which does not have essential significance for it. The fact that scientific

understanding of existence is possible to as great an extent as it proves to be the case is of great significance for a man's personal faith, which after all must be conditioned by the relation to existence as this, after the most exact investigation, shows itself to be constituted. Thus the Copernican hypothesis and the expansion of the picture of the world to which it led have also exercised great influence on the conception of life of modern times, and the science of the nineteenth century, which both in extent and in depth has continued the transformation of the picture of the world, cannot without more be counted as inessential knowledge. Moreover, science cannot renounce the right also to draw the personal life itself under its investigations, even if it here comes to stand before one of its most individual and complicated subjects. — In a series of lectures on the principle of personality in philosophy (published in Swedish 1911) I have sought to assert the significance of the principle of personality in such a way that the view here indicated of the relation between personality and science nevertheless came into its own. —

[142] It is a very essential trait in the characterization of the nineteenth century that a line of thought such as that which the anti-Romantic and anti-realistic authors just mentioned represent has found such energetic expression. In an earlier connection (the section on psychology) we regarded some of these authors as remarkable subjects for psychology, for which they were suited by the powerful, contradiction-laden character of their personalities. Here we have drawn them forth again as spokesmen for a principle that they, precisely on account of their own subjective peculiarities, were suited to assert. The principle of personality, as they conceive it, is in the first place a means of purging all that is spurious, external and habitual. But it contains at the same time the truth that everything that is produced or appropriated with personal force and depth thereby already gets its value, quite apart from what a closer testing leads to. And it opens finally the eyes to the richness of human life, to the many individual points of departure for spiritual life. It removes perhaps for the time being the prospect of fellowship and unity in the domain of spiritual life, but opens in return the prospect of richer and more manifold forms of spiritual life. There may come a new grounding of what one can call in the widest sense the religious life (whether this name be retained or not), when the foundation becomes the real life-experiences of men, interpreted according to each one's personality, and when it is not the experiences and interpretations of earlier generations that are without more laid to the foundation. It is the honor of the nineteenth century that it has had an eye for the necessity and the possibility of such a renewal, although the goal is

great and distant.

5. RELIGION AND MORALITY

As mentioned above, in the tercentenary after Luther's appearance protest was made from a churchly standpoint not merely against the free reason but also against the free conscience. It will now have its interest to see how the relation between religion and morality shaped itself in the course of the century.

After the Revolution and Napoleon had been struck to the ground, the Holy Alliance proclaimed Christ as head of the state, the princes as his delegates and the Bible as the guiding principle for internal and external politics. But apart from the fact that the princes, after the way they had acted toward one another at the Congress of Vienna and afterwards toward their subjects, were not exactly suited to be divine
[143] delegates, the whole idea so conflicted with the character of modern state and national life that it was and remained a dream, even where it was meant seriously. Not even the theological ethicists who sympathized with this dream ventured to go so far. The German philosopher of law Stahl nevertheless set up the idea of a Christian state. In such a state the Christian church is the only church that is protected; the Christian law of marriage holds; the school is directed by the church, and Christian confession of faith is a condition for access to offices and for eligibility to popular assemblies. Later in the century Martensen too in his "Christian Ethics" spoke up for a Christian state; but then the demands were considerably lowered. He demands merely that the state shall be built upon a religious foundation, since it would otherwise have no ethical authority, for all ethics rests on religious authority. Fundamentally only Christianity can provide the foundation for such authority; but it is not required that all in the nation be Christians, only that the nation bow to the authority of the Christian conviction. The Christianity of the state shows itself in its supporting the church, upholding Christian custom and usage among the people and letting its legislation be animated by Christian presuppositions.

It was, as Stahl and Martensen are examples of, especially speculative theology and the High Church tendency that asserted the Christianity of the state. When, on the other hand, one lays the weight on the people's free association around a cult and the confession of faith attached to it, one will naturally come to look differently at the relation between people, state and church. Grundtvig, who after his visit to England had won a free and natural view of human and civil relations, realized that social

relations must be ordered according to the experience of human nature that history reveals at every given place (the preface to "Mands Minde". 1838). Social ethics, and indirectly all ethics, was thereby placed on an independent footing. In conscious opposition to every theological grounding of the order of moral and civil life stood the so-called doctrine of utility (utilitarianism), which in Bentham's, James Mill's and Stuart Mill's hands became a mighty reformatory organ, while the attempts at a speculative grounding of morals as a rule had a conservative character; the Hegelian philosophy of right, which was mentioned in an earlier connection, is a classic example of this. But whether one conceives of ethics as a strictly rational science, or considers it necessary to build on the continually growing experience of the effects of actions and institutions, there has in the century stirred a decided endeavor to assert the independence of ethics, and thereby of social life, from dogmatic presuppositions. *[144]* (See above the section on ethics). In the practice of life it is, however, not always necessary to go back to the ultimate principles. What in the individual case springs from confessional motives may in its effects very well agree with what from a rational or utilitarian standpoint would have to be required. The motive of valuation need not always coincide with the motive of action. A great example is the way in which churchly philanthropy has in many respects paved the way for the humane. Already Vincent de Paul in the seventeenth century expressed the most important of the main ideas of modern philanthropy. Whether one proceeds from religious motives of action or not, a humane mind will be concerned that something be accomplished of real benefit to the suffering, so that the motive of valuation in the end becomes purely human.

It is, then, not in the philanthropic domain that the difference between religion and morality needs to come forward. All will agree that things are bad when men hunger, thirst and freeze. It will be otherwise when it concerns the whole work of human cultural life, — the significance of work in and for science and art, civil freedom and technical development. Can all this be grounded on strictly churchly presuppositions? — We stand here before a problem that has occupied thinking spirits in the nineteenth century in a more decisive manner than in earlier times. It is of course not for all men that this problem has been able to arise. In practice most live on an involuntary fusion of tradition, experience and reflection, without becoming conscious of the ultimate sources of their views. That the problem has come forward is due partly to a historical comparison between primitive Christianity and the Christianity of modern times, partly to an ethical investigation of how the modern Christian practice

sanctioned by the church stands to primitive Christian ethics. It is more philosophers than theologians who were led to raise these questions and thereby led to point out the opposition in principle between original and modern Christianity in ethical respects. Schopenhauer and Feuerbach saw this opposition clearly, and from their very different standpoints Kierkegaard in his polemic against the existing church maintained that the Christianity of the New Testament — by which he thought especially of the New Testament ethics — did not exist. The decisive point for these thinkers was precisely the relation to the higher human culture, to work for science and art, for
[145] political life, social progress and personal freedom. Such work has no root in primitive Christian ethics. And the more recent historical investigation of primitive Christian literature has (as already mentioned above) demonstrated the great influence that the expectation of Christ's near return, and with it of the conclusion of all human striving, has had on primitive Christian thought. Everything came to depend on one's living with one's whole soul in this expectation and in preparation for what its fulfillment was to bring. Work toward the continued development of human culture and human conditions of life could then not become of decisive significance. It is on its own responsibility that the church has later sought to draw the whole humane culture under the standpoints that its dogmas indicated. Several eminent theologians have felt the difficulty that here lies for Christian ethics. A letter from the church historian Hase from his youth is in this respect so characteristic that it must be quoted. "When I," he says, "take Christian piety in its peculiar historical character as the exclusive striving after the Eternal, as an otherworldly longing, for which earthly life is only a pilgrimage to heaven, then I understand such a mood well enough and know how to respect it, as I respect everything where only one single thing is willed with vigor, one single thing loved above all things; but in myself there is also a good bit of paganism, which holds the world dear and dives down into its beauty and into its pain, — and not, as the pious so often do, involuntarily and half with a bad conscience, but without feeling remorse, with conscious purpose and in full consciousness, because I regard the counterpart as a one-sidedness, however exalted this has often been." What in the spirited church historian comes as a sincere self-knowledge, later theologians have wished to set up as a churchly theory. Ritschl thus distinguishes between a wider and a narrower content of the New Testament. To the narrower content he then counts what no longer corresponds to the needs of the congregation, among other things "das Detail urchristlicher Hoffnungen". Harnack wants to separate the actual "Evangelium" from the whole primitive Christian content, and to this "Evangelium"

he does not count the proclamation of the literal nearness of the Kingdom of God. But Harnack has seen so clearly that when one takes eschatology (the belief in the imminent conclusion) away, the basic motive in Christian ethics falls away too, and that an ethical principle is lacking which can orient toward the civil life and modern culture, and he therefore wants to supplement the "Evangelium" with thoughts drawn from the Greeks and from Goethe. The highest would, in his opinion, be attained when one could "combine Augustine's piety, inwardness and absorption with the *[146]* openness of antiquity toward the world, with its calm, vigorous activity and its clear and bright mood." Also among theologians who are far from agreeing with Ritschl and Harnack the problem comes forward, thus in the remarkable correspondence, remarkable for the history of the time, between two Danish clergymen (Otto Møller and Skat Rørdam). The content of the Christian faith stands for them as given once for all, and the conclusion of all earthly existence may come at any moment; they look with heartfelt longing toward this conclusion — but what if Christ now comes before the completion of the national and cultural development to which they too had bound their heart and their hope, and which requires the work of unforeseeable ages! —

The problem that here arises concerns at one and the same time the relation of modern Christianity to primitive Christianity and the relation of Christianity in general to the culture which it has not itself produced. Alongside the previously mentioned problem of the relation between the literal and the figurative in the religious representations, this is a main question, the practical answer to which will be of great significance for the spiritual development in the new century.

6. THE RELIGIOUS PROBLEM AT THE TRANSITION TO THE TWENTIETH CENTURY

There was a time in the seventh and eighth decades of the century when many were inclined to believe that the religious problem had once for all been put aside and would die a quiet death, like so many other problems that in their time had occupied the minds of men but rested on presuppositions that no longer existed. It was especially the effects of the vigorous upswing of natural science at the middle of the century that now exerted their influence on larger circles. In the Nordic countries this influence united with the movement that a vigorous Renaissance in the poetic and aesthetic domain had awakened. One felt a new enthusiasm for spiritual freedom

and deep aversion toward the Romantic epigones, who did not understand that their time was past. Philosophically considered the whole movement was not very deep. One rejoiced, like Faust's famulus, over how splendidly far we had come. Faust himself was after all not as glad as Wagner. And the real inquirers did not share the confidence, frequent especially in literary circles, that everything was now settled and done. It was the time of positivism, but neither Comte nor Mill, neither Darwin
[147] nor Spencer believed that all riddles were solved, however sure they were that science on the whole was on the right way, and however firmly they, as honest inquirers, believed in the justification of their own hypotheses. Just as toward the end of the eighteenth century one often had an exaggerated confidence in the "enlightenment" one had attained, so now in a more realistic form a corresponding trend of mind was fairly widespread in the said decades of the nineteenth century. There can now also be no doubt that very much in the current religious representations could not subsist with the secure results of science or be reconciled with its standpoints, let alone be demonstrated by its methods. And it was especially the fact that there was so much one could no longer believe in that occupied the minds of many. It was the negative side of free inquiry that people came to lay most weight on. I wrote about it in my Etik (1887): "Only if our thought and our feeling have really been expanded does the liberation from the doctrines of positive religion have any ethical significance. Not to believe anything is about the least that can be said of a man, and cannot give him any positive value, especially since a negative creed can be adopted in just as unindependent and thoughtless a manner as the positive can be adopted." But even among those who were not content to become clear about what they did not believe in, and who also did not care to appear as emancipated schoolboys who make fun of their catechism, even among them there prevailed a more or less complete indifference toward religious questions. The spirit of realism that prevailed may even be said to have seized theology itself, which now, after the dying out of philosophizing theologians, sought a purely positive ground in a sharpened faith in authority. The Catholic Church proclaimed the infallibility of the Pope and the sole legitimacy of medieval theology; the Protestant church held to its confessional writings, made use of the word "positive" as a slogan and of a reference to "the congregation" as the final argument. In the last decade of the century, in the nineties, a new current is traced in the various countries outside the church and an increasing self-confidence within the church. Some years ago I expressed myself on this in the following manner, and cannot now express myself better.

It is evident to every unprejudiced observer that there have been spiritual needs which the preceding literature and currents did not satisfy, and which now make themselves felt more and more strongly. And since the world now, as Luther already experienced, is like the drunken peasant who, when one has helped him up on one side of the horse, falls down on the other side, so this new tendency, which like the *[148]* preceding one talks much of "what moves in the age," becomes, for its part and in its own way, often guilty of corresponding errors to its predecessor. Its language is often marked by even greater arrogance than its predecessor's, which is connected with its not, like the latter, having the feeling of being a militant church, but without more ado thinking it can appropriate the traditions of millennia.

Such a movement is to be traced in all countries, both as regards what is natural and legitimate and as regards what is overstrained and superficial. It is particularly prominent in France, as a counter-wave after the victory and excesses of anticlericalism. The remarkable thing is first and foremost that the movement cannot be traced back to new thoughts and points of view. No superior personalities appear here as leaders, and no new solution is given of the old difficulties of dogmatism. One has learned nothing and forgotten nothing. At most one goes around the difficulties. As regards the motives, it is difficult to decide to what degree personal need of refuge, of calm, help and comfort is the determining factor, and to what degree, particularly in the case of the many, need and desire for spiritual fellowship and comradeship, thus a social element that does not wholly coincide with the religious element, make themselves felt. An old Kierkegaardian cannot help shaking his head at the frequent talk of "the numerous Christians of these times," which has replaced the previous times' "little flock".

One thing there is, however, that even Kierkegaard, if he could still walk among us, would have to acknowledge, and that is the great work that the church and its men have set in motion to bring help and comfort out there where it is most needed, to those "who sit in the corners and slink about on the roads." The church here makes use of its hold on the people and of its great organization to practice philanthropy on a large scale, and certainly with more discretion than formerly. This deserves all honor. But the church must not forget that it has an intellectual account to render, which it does not settle by reference to its edifying and philanthropic activity. When Scipio Africanus was accused in the popular assembly of disorder in his accounts, he said: "On this day I defeated Hannibal at Zama; let us go to the Capitol and thank the gods!" The people followed him. But it is not reported whether it helped the accounts.

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The movement may recall the one that arose at the beginning of the nineteenth
[149] century, except that it has not so far borne such rich fruit for spiritual life on the whole as that one. We still lack material to form a clear understanding of the real causes of the movement, whereas such material for the movement of a hundred years ago is available in fairly rich supply. If, as investigation seems to establish, four elements chiefly cooperate in the origin of a religious faith, — the influence of venerable tradition, one's own reflection, the results of knowledge by experience, and the innermost need of the heart, — then it has now been the first and the fourth element (tradition and personal need) that have played the main role, whereas the second and the third (reflection and experience) were effective in the first line in the immediately preceding time.

It will be of interest to hear a testimony in this matter from a thinker who had to a high degree contributed to determining the line of thought in large circles in the seventh and eighth decades of the century. Herbert Spencer in the year 1893 (in his seventy-third year) wrote down the following remarks in his autobiography.

Spencer first mentions a change that has taken place in his older days in his political views. "While in the days of youthful enthusiasm I thought that all would go well when the form of government was changed, I now think that changes in the form of government can only be of benefit insofar as they are expressions of the citizens' changed nature." He then remarks that a corresponding, perhaps somewhat less pronounced change has taken place in his conception of religious institutions. "While the current faith slowly lost its hold on me, the only question seemed to me to be that of the truth or untruth of the special doctrines in which I had been instructed. But gradually, and especially in the later years, I became clear that this was not the only question. This was in part caused by the more comprehensive acquaintance with different human societies that I had gained ..... So striking is the evidence that among races in different parts of the earth without mutual connection progress in civilization has gone together with the development of a religious system which was absolute in its dogmas, terrible in its threats of punishment and led by a mighty priesthood, that one must necessarily conclude that without such a factor the maintenance of social subordination would have been impossible. One may well feel much astonishment at the slight effect that threats and promises supposed to stem from a supernatural source have had. The history of Europe, which is bathed in crimes throughout, seems
[150] to show that fear of Hell and hope of Heaven have had little influence on men ..... But

they must nevertheless have had some influence, and had they not been, things would surely have been worse. And in any case the right grounds for good conduct lie too remote and are too obscure for people, as people have been and are, for them to be able to exert any effect ..... Furthermore it shows itself more and more clearly that real faith is constantly different from literal faith and adapts itself to new social and individual conditions ..... In modern sermons theological dogmas recede more and more into the background and ethical doctrines come to the fore, so that we may think that in the course of time we shall reach a stage of development where it is acknowledged that the riddle of existence is insoluble, and where religious institutions will then be placed in the service of ethical culture. By these paths I have come more and more to look with calm on forms of religious faith toward which in younger days I felt a decided aversion. Believing that they are on the whole naturally formed in relation to the different peoples and times, I consider it good that they each live and work as long as the conditions permit, and also that sudden changes of religious institutions will surely be followed by reactions ..... But to a large extent, perhaps chiefly, this change in my feeling toward religious faith and the institutions that sustain it has sprung from an ever deeper conviction that the place in mental life which it has occupied can never stand empty, but that the great questions about ourselves and about the existence of which we are a part must constantly arise anew, and that, even if no positive answers to them can be found, there must nevertheless constantly assert themselves mental states (modes of consciousness) that can take the place of positive answers ..... Religious faith fills a place in mental life which thought strives to fill, but without being able to do so, — and is able less and less to fill, the more it strives for it. I have therefore come to regard it with a sympathy that has its origin in a need I also feel. My divergence from it comes from my not being able to accept the solutions it brings, but I cherish at the same time the wish that a solution might be found!" —

Spencer is certainly right that knowledge of the history of religion must work in the direction of understanding the place of positive religion in practical human life. It makes it easier for us to feel our way into the disposition on which the historical religions rest. And when to this is added the reawakening insight into the nature of the problem of knowledge and into the limits of its solution, it is understood that one comes to look differently at religious questions than before. The old objections *[151]* to religious doctrines now lie so near and have become so trivial that an aversion naturally arises to bringing them forward, little as they are answered and can be answered. It is a criticism any child can practice. But for him who has a sense for

the jubilation over the sustaining powers of life or for the anxiety about what may threaten the values of life, as well as for fidelity to that to which one has bound one's heart, — feelings which have all found expression in the cult of the religions, their legends and their dogmas, — for him criticism will never have the last word, but will be followed by a hope of new spiritual forms of life that can lead beyond the disharmony to which the history of the religious problem in the nineteenth century also bears witness.

How the mighty experiences of the second decade of the twentieth century have worked and will work in the time to come must be left to be answered by those who have prophetic ability. It is conceivable that these experiences have brought many men into an immediate relation to the most elementary opposites of life, pleasure and pain, joy and sorrow, jubilation and anxiety, life and death, — and that it will lead to men's building their personal faith on that whose power they, as standing nearer or farther, have tested in life's struggle. Whether this then again leads back to an old faith or over to quite new thoughts about life, time will show.

CONCLUSION

[152] There is hardly any age that has thought more about itself and about its relation to its predecessors than the nineteenth century. Other ages have thought they had the right to feel their opposition to the past with pride or at least with the certainty of faith of being on the right way. This holds for Greek antiquity in relation to the barbarians, for Christian faith in relation to paganism, for the age of enlightenment in relation to the darkness of the Middle Ages. To be sure the nineteenth century too has had its self-esteem. It has at times regarded its science as a consummation, in relation to which the intellectual striving of earlier ages stood as a series of preliminary stages, or it has been glad in the consciousness of the manifoldness of its external culture, also in the thought that knowledge is now spread in far greater circles than before. But by virtue of its historical sense the nineteenth century has an understanding of the culture of earlier ages and of its justification as an expression of their life, an understanding that was formerly lacking, and which had to lead to circumspection in self-appraisal. The great question had now really to become whether what one called one's science, one's art, one's religion, one's culture really stood as form and expression of an energetic inner life, of depth and earnestness in relation to the tasks. There had come forward — and this decidedly redounds to the honor of the century

— a standard that made it more difficult than before to have an undivided feeling of one's own excellence. There were many discontented spirits in the nineteenth century, and there were especially many who missed the fullness and power of life which all intellectual progress and all perfecting of the external apparatus of life ought nevertheless to serve. And if it is justified to characterize the nineteenth century as the age of confirmation by experience, then it is understandable that it could never feel itself wholly satisfied by its own striving. For full confirmation by experience of the greatest and most significant thoughts can never be had. Even the success a hypothesis has is — as Leibniz already saw — no proof of its truth. The very concepts one forms of truth and of humanity must again and again stand their test. The idea of the struggle for existence, one of the most remarkable thoughts of the nineteenth century, teaches that work and struggle are constantly required to maintain what *[153]* has been won. The most glorious types can perish when they do not satisfy what circumstances demand.

Already some of the foremost men of the eighteenth century had an eye for how long the way was to what could rightly stand as human ideals. Rousseau condemned the culture of his age but looked forward to a "natural culture" proceeding from life itself. Lessing was repelled by both rationalism and orthodoxy and hoped for "a third age," "the time of the new, eternal Gospel." And Kant saw clearly that the finished works of men — the complete forms of belief and systems of thought, the existing states — easily become dead treasures and hindrances to development, and his striving was to set free the forces that had in their time produced these works, so that new work might become possible. In the nineteenth century both Romantics and positivists were at times inclined to think that "the third kingdom" was immediately at hand, if it was not already in our midst. One thought that one had acknowledged what was valuable in the culture of earlier ages and made it fruitful in new forms. But it was nevertheless an essential moment for these tendencies that there was still a resistance to be overcome. Hegel expressly laid weight on the significance of negations and oppositions; without passing through a purgatory one could not enter the paradise of "higher unity." This did not shake his optimism, which reveals itself in a characteristic manner in his conception of the tragic (in art as in life); this consisted for him in a conflict between two powers each in itself justified, which then precisely through such conflict received their proper limitation. The tragic means in Hegel not catastrophe. For Comte there was indeed still resistance to be overcome from theological and metaphysical tendencies, but the positive stage, which was to become

the definitive one, had on most points already been reached, and the stage where both science received its full due and the religion of humanity its full unfolding was not far off. And although Herbert Spencer distinguished between evolution and progress (after having from the first made the two concepts one), he retained the belief that through division (differentiation) as an intermediate stage new, ordered wholes were to form. The difference between the Romantics and the positivists consisted on this point especially in this, that the Romantics thought the new was already present in the old, if only one opened one's eyes, whereas the positivists placed the new in
[154] greater opposition to the old, although it brought full equivalence for this. On both sides there prevailed a confident mood toward the problem that the spiritual fathers of the nineteenth century in the preceding century had left behind, — — namely the preservation of the closedness and instinctive energy of the primitive culture under advancing and restless inquiry and the carried-through division of labor. Only a single voice sounded in the first half of the century in the opposite direction, but it was for the time being little heard. Arthur Schopenhauer sought in his work "Welt als Wille und Vorstellung" (1819) to show what deep irrationality manifests itself when we open our eyes to all the obstacles and inhibitions that every tendency to development meets, and above all when we turn our eyes to the deep, insatiable craving of all living things to exist at any price, and when we at the same time in compassion make ourselves one with the craving that other beings feel just as we ourselves do. It was a grating sound that for a time only was drowned out by the harmony orchestra of Romanticism and positivism. It later gained a hearing, and it even became the occasion for the word "pessimism" now being used to designate a whole view of life, whereas before it had been used only (in English literature) in a more limited sense. It may be said to be characteristic of the course of development in the nineteenth century that this expression has gradually gained currency. In the year 1878 it was recognized by the French Academy, whereas the opposing word "optimism," which was formed to designate Leibniz's bright view of existence, was recognized by the Academy as early as 1762. When Schopenhauer, and later (1869) in his footsteps Eduard v. Hartmann, could win so much attention for their systematization of pessimism, it must be because the general life of mood was prepared in that direction by the way of experience itself. Political and social conditions worked here in a decisive manner. The time after the end of the Napoleonic wars was in many respects an empty and oppressive time; a greatness had vanished; small men stepped into his place; broken promises and disappointed expectations aroused resentment and weariness. It was the time of

Leopardi, Byron and Heine. A corresponding period came after 1848, after the popular risings had been subdued, and after revolutionary idealism had proved powerless against an ever watchful reaction. And for Germany it was so far from being the case that the founding of the new Empire after the victorious war with France brought a feeling of happiness with it that precisely the seventies in that country became a time of pessimistic moods. Bismarck once asked in the German Reichstag whether any of the gentlemen had ever seen a contented German. Setting aside such moods of the time, there can be pointed to various grounds which explain why the nineteenth *[155]* century has given the word pessimism the right of citizenship, whereas it was the eighteenth century that established the word optimism.

It was a manly faith that in the first half of the century was nourished by Romantics and positivists, that a harmony could be reached in spite of all doubt, all contradictions and all obstacles. But it became clear on closer investigation that there was a difficult point in their grounding of this faith. If we look more closely at the threefold structure in all development that Hegel, Comte and Spencer all assumed, then the transition from the second to the third member is not so certain or necessary as the transition from the first to the second. One can come from faith to doubt without through doubt reaching a higher form of faith. A concentrated and uniform state can be succeeded by a differentiated state, without the dividedness afterwards coming to be an intermediate stage to a higher kind of concentration. The advancing specialization of science is not favorable to a large and unified view of existence. In social life the division of labor threatens to lead to dissolution or at least to one-sidedness and isolation. It is, after all, also out in nature far from being the case that there are always favorable conditions for the formation of totalities in which the scattered elements are united into unified action. There can, moreover, be progress in particular domains and in particular respects without life as a whole therefore making progress. And it is not always that social and technical progress in reality means true and lasting goods for all individuals. It could finally be thought that for human culture the law held, as for physical processes, that the energy gradually distributes itself and an equilibrium arises which makes the release of energy impossible; the result would then be dullness, in the end spiritual death. Such possibilities one must face, and it was no wonder that pessimistic currents came when they began to dawn on consciousness. One understands why Hamlet figures are so frequent in the literature of the nineteenth century, although they do not have the greatness that Shakespeare's genius gave the figure after which the type is named.

It is the honor of the nineteenth century that it has not pushed back such thoughts, although they threatened to burst the harmony with which the century began its course. In the work of thought and imagination they may for a time recede, as Prospero in "The Tempest" is so absorbed in his visions that he forgets that Caliban is still about. One does not despair because Caliban is there, and because he cannot be converted at such a speed as happens in Shakespeare. And the great thoughts
[156] which Romanticism and positivism each in its own way shaped do not lose their value because "the higher unity" has not yet revealed itself. Who says that it must be so near? And who says that we can construct it in advance? In no domain can one derive the special character of a whole from the elements one knows only in their separate existence. But for that reason one cannot in advance deny the possibility that a new building can be erected from the elements.

It would be wrong to call the nineteenth century the age of pessimism. It is too many-sided for that. If the nineteenth century has in the foregoing presentation rightly been characterized as the age of confirmation by experience, then it is thereby given how a son of this century will stand toward the misgivings that it itself has raised. There is no other way out than this: in life to go on struggling to overcome the scattered and the disharmonious, and in thought to go on inquiring in order to expand experience and to see whether the expanded experience — even if it should bring new, unforeseen problems — does not lead to a solution of the problems at which we now stop, or perhaps to insight into their groundlessness. We can retain faith in a third kingdom, even if it is not so near or so easy to describe as has been thought. The best and the most faithful in the nineteenth century have lived and worked in such a faith.