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CONTEMPORARY THOUGHT *of* FRANCE

by

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TRANSLATOR'S PREFACE

In the following sketch of contemporary thought in France Dr. Benrubi, who writes in German, has endeavoured to trace the development of French philosophical teaching along three main lines. This plan has naturally made it necessary to deal in some detail with the works of philosophers who are "recent" rather than "contemporary" in the narrow sense. For a non-specialist in this country modern French philosophy is a matter of three or four great names: Dr. Benrubi's work will serve to show that there are many other mighty men, although they "attain not to the first three." A sympathetic insight into the works of these writers, based on that accurate and clear knowledge which is the distinctive mark of every school of French thought, ought to be of no small help towards a completer understanding of the mind of France. As the reader will notice, the author deals also with the contemporary thought of French-speaking Switzerland.

The translator would express his thanks to the General Editor for many valuable suggestions.

E. B. Dicker.

Bristol, 1926.

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CONTEMPORARY THOUGHT OF FRANCE

INTRODUCTION

In reviewing the last twenty or thirty years—if the expression "Renaissance of Philosophy" is too bold—it is certainly justifiable to speak of a "Springtide of Philosophy." The works of philosophers of every epoch are being keenly studied, not only by professional students of philosophy, but by specialists in various branches of knowledge, by artists, by statesmen, by working men, in short by the public in general. Lectures and addresses on philosophical subjects are growing in popularity. Congresses of philosophers are now quite ordinary events. A number of philosophic associations have been founded, among which the "Kantgesellschaft" in Germany and the "Société Française de Philosophie" in France have been especially and fruitfully active. Now this is no mere idle affair of fashion, but a profound symptom of the age we live in.

Another characteristic of the philosophic awaken-

ing of to-day is this, that philosophers feel it their duty not merely to limit themselves to the invention of ideas and abstractions, but rather to come into contact with realities. Perhaps, influenced by the prestige which the exact sciences have gained, philosophers are one and all striving to obtain a closer knowledge of the facts of physics, chemistry, biology, psychology, sociology, art, religion, history, and the like, and to confine their speculations to these facts. Hence the great variety of currents and tendencies in the philosophic activity of to-day. A consideration of the more or less essential difference between the facts of the present age and those of the past forces us to acknowledge that the philosophic movement of to-day cannot be traced back to any particular philosophic teaching of any previous age. This movement bears a stamp wholly its own: it presents to us a view of the universe corresponding to the totality of our own life.

In the present work we shall confine ourselves to an examination of the mode in which this view of the universe is conceived by the philosophers of France. In doing so we are aware of the artificial nature of such an isolated method of procedure. We feel that we are doing violence to reality, for never were the philosophic endeavours of all nations, and especially those of France and Germany, so closely interwoven as at the present day. It is

quite impossible to set apart and define what is purely French in the philosophic movement of to-day. It is certain that in the realm of philosophy conditions of nationality can no more be ignored than conditions of time. The philosophic movement forms an integrating component in the sum-total of the life and activity of an epoch. Philosophy, by virtue of its character of universality, draws the whole material of its being from life's rich store. Greek philosophy carries the mark of the classic type. In the philosophic teachings of the Middle Ages there is essentially a reflection of Christianity. The philosophic systems of modern times are most closely interdependent with the growth of civilisation and especially with scientific discoveries and inventions since the Renaissance. Philosophy does not repeat itself. All its problems are rooted deeply, not only in the totality of the life of an age, but also in the work of the thinker who deals with them. A German Descartes of the eighteenth century, a French Kant of the seventeenth, are equally unthinkable. Fichte's phrase "The philosophy a man has shows what sort of a fellow he is," can to a certain extent be applied to nations.

But the period and the nation are merely individual characteristics of philosophic creation. They do not in the least justify us in making them our

sole criterion in the history of philosophy. Truth belongs neither to the Middle Ages nor to the Present: Truth is neither French nor German nor English. With Leibnitz we may allow ourselves to speak of a "Perennis philosophia." We have no right to ascribe to this nation or that a monopoly of the Truth. The philosopher may have a country: Philosophy has no homeland. In the realms of Truth rivers, mountains, and the like are the most inadequate of frontiers. Nationalism is a mighty peril, not only for philosophy, but for the total life of a nation. Sooner or later it is bound to lead to a rending asunder of the innermost bonds that make humanity one.

This then is our fundamental conception: yet in the present work we venture to separate France from other nations, because France is an individual member of the organic whole of humanity as it exists at present. For about half a century France has had, in the realm of philosophy, something to say and something to reveal. Our duty it is, to bring ourselves to learn this message: without being at the same time blind to the philosophical creative activities of other nations: and least of all do we desire to set French philosophy under a glass case and to extol it or disparage it when referred to the philosophical endeavours of other nations.

THE THREE MAIN TENDENCIES

WHAT is the main basic characteristic of the philosophic movement in France at the present day? Is there a spirit which animates the whole, amid strivings which are multifarious and often opposed? Or can we find at least some typical characteristics which justify us in speaking of a French philosophy of the present day? We are able to answer these queries in quite general terms: as in the totality of the life of the present age, so also in the realm of philosophy there prevails a profound discontent with things as they are, and a pressing need to win through this discontent and to attain to a spiritual and harmonic existence. This endeavour makes itself felt in two phases: (1) as a reaction against the various divagations of empiric positivism: (2) as an effort, essentially positive and synthetic, to attain to a view of life and the universe and a remoulding of the same which shall be metaphysical and spiritual. In general therefore three tendencies may be discerned in the philosophic movement in France at the present day. Empiric Positivism, Critico-

Epistemological Idealism, and Metaphysico-Spiritual Positivism. And in these it is not a question of the creation at will of subjective concepts: it is rather a matter of Life-evolution, life-systems—in a word, of "Syntagmas" in the terminology of Eucken. Let us apply ourselves first to the study of the first main tendency. So shall we prepare the way for the understanding and appreciation of the two others: and that is the main business of the present work.

I

EMPIRIC POSITIVISM

EMPIRIC Positivism is not an abstract theory, but a typical Life-system of the nineteenth century. It is an atmosphere that permeates all thought and all action—Theory of Knowledge, Ethics, Religion, Sociology, Art, Politics. To give Empiric Positivism the name of Negativism would be no paradox. For its deepest root is of a negative character; this philosophy has sprung from the need of finding a reaction against traditional metaphysics and especially against the exuberance of Eclecticism, the desire to replace philosophy by "scientific method," and in this way to arrive at a "scientific philosophy," to deny the claims of the intellectual life to any independence, and as the whole content of reality to acknowledge nothing except mere actual phenomena.

A forerunner of this movement in philosophy is found in that type of the Philosophy of Enlightenment which is ruled by the scientific point of view: according to this the only science is the science of Law, and the only form of exactness is the exactness of the mathematical-scientific theory. If our

outlook is limited to France, we may regard the Encyclopædists as its pioneers. Condillac too opened up new paths in this direction: influenced by Locke and Hume, he defines our whole intellectual life as a transformation of simple passive sensations (sensations transformées): his outlook is out-and-out sensualistic and anti-metaphysical. From his teaching, and also from the doctrines of Lamettrie and Cabanis, Broussais and Gall drew further inferences: they explained Man wholly and solely through his physical constitution and referred life back to a mere mechanism. Destutt de Tracy invented the term "Ideology" to characterise the work of his master Condillac. But the first real valiant pioneer and upholder of the Empirical Positivism which is a power even in our own days is unquestionably Auguste Comte. We therefore consider it necessary to give an outline of the Positivism of Comte, since the main features of his teaching will appear in all the later variations with more or less intensity.

Auguste Comte (1798–1857)

Comte passed through many phases. He, by an ironic dispensation of destiny, reversed in his own intellectual development the three stages which, as he declares, Humanity must have traversed: from the positive stage, in which he found himself

in his first period, he advanced or retrograded to the metaphysical and religious stages. So in his later works he combats Empiricism with utter decision. He says, " L'empirisme absolu est impossible." Without a leading idea or hypothesis, scientific observation is impossible. Imagination must prepare the path for observation. Thought must point out the road to experience. The positive mind strives to enlarge the realm of Reason, to the detriment of mere experience. To this degree it is possible to say that Comte abandons the pure empiricism of Bacon. At the end of the last volume of his " Cours de philosophie positive " he maintains that indeed in the non-organic sciences it is possible to advance from the particular to the general, but that in the sciences of the Living the knowledge of the particular can only be deduced from the general. He most determinedly denies the possibility of referring back the phenomena of life to phenomena of chemistry or physics. If we endeavour to explain the higher by reference to the lower we are seeking to explain it by its matter, and we merely relapse into Materialism. Opposing this tendency, Comte now affirms that the lower can only be explained by the higher: the interpretation of nature must be sought in humanity. And so, in the hierarchy of the sciences, he assigns the first place to the intellectual science of humanity,

to Sociology. As for Man himself, Comte endeavours in his "Politique positive" to explain everything through Love. The fundamental dogma of the Positivist religion runs: "L'amour pour principe, l'ordre pour base, et le progrès pour but."

Yet, through all the changing scene of Comte's philosophy, we are justified in considering his empirical and anti-metaphysical Positivism as his most characteristic contribution. This above all assures him a place in the Pantheon of the human intellect. It is precisely through this essential aspect of his creative work that his influence in France has been most lasting. Hume and St. Simon on one side, Lamettrie, Cabanis, Cuvier, Lamarck, Condillac and their kin on the other, exhibit the greatest affinity to Comte. Under the influence of his master St. Simon, Comte takes as starting-point, not mere abstractions, but positive knowledge, the Positive, *i.e.* the world of immediate perception and experience. Together with Hume, however, whom Comte in the "Catéchisme positiviste" (1852) describes as his greatest predecessor in philosophy, he identifies the Positive with the Relative. The basic features of Comtian Positivism are thus: the Positive, the Empiric, and the Relative. Thorough knowledge of Laws must take the place of a search for Causes. Absolute Truth does not exist either in philosophy or science.

The principle of conformity to law is the fundamental principle of all scientific investigation. Individual sciences are distinguished from each other, not according to Method, but Subject. The study of each category of science postulates the complete knowledge of the laws of the preceding category, and itself forms the postulate for the complete knowledge of its successor. This is the principle of the hierarchy and classification of the sciences, in Comte. After Mathematics follow in the order of decreasing generality and increasing complication: Astronomy, Physics, Chemistry, Physiology (or Biology), Social Physics (or Sociology).

Especially characteristic of the positive stage is the abandonment of the attempt to treat all problems with reference to the knowledge of the essential nature of things. We find in the "Cours de philosophie positive" (Lecture 28): "All thinkers are now convinced that our real studies are rigidly confined to the analysis of phenomena with a view to the discovery of their actual laws, *i.e.* their constant relations of sequence or similarity." This is equivalent to saying that Empiric Positivism assumes a strict fixity and immutability in the laws of nature. "Everything that happens," says Comte in another passage, "in the non-organic world and the organic, in the material and the

intellectual, in the individual and the social alike, is always subject to rigidly unalterable laws." There is no room here for Final Purposes. Closely connected with this is the Positivist theory of the "milieu." The conception of the "milieu" itself was created by Comte to denote those external circumstances which determine the existence and inner nature of every organism. Whereas the doctrine of Final Purposes claims to "explain," the principle of environment goes no further than to connect the laws of sequence with the laws of co-existence. Therein is the aim of science. But neither the principle of conformity to law nor the principle of environment is "a priori." The foundations of both rest on a "colossal induction." In science as in philosophy Comte has no use for the Kantian "a priori." In his teaching there is no essential difference at all between philosophy and positive science. All real knowledge depends on facts, which certainly may be particular or general. Philosophy is likewise relative and positive, founded, like the individual sciences, on induction, but with this difference, that in the place of the individual it sets the whole, in the place of the particular the general, the universal. Philosophy is the highest and most comprehensive form of positive knowledge: it is the "totalisation de l'experience." But this universality has nothing in

common with the Kantian " a priori." Without abandoning the standpoint of exact science, it goes no further than to present a uniform and universal image of Reality as empirically manifested by phenomena. Sociology is nothing more than the accomplishment of this plan: the universalising of the positive method as applied to the ultimate type of natural phenomena which are accessible to us, the social phenomena. Ethics is in the nature of things nothing more than " Social Physics "; or, more correctly speaking, " Social Technics "; and is relative in so far as it is necessarily determined by our position and by our organisation, so that if there is a change in the totality of the conditions of our life (the astronomical, physical, biological, and sociological conditions) conduct also will become different. The morality of Reason is only a continuation of the morality of Instinct, " You ought " is a continuation of " You are."

Such are the chief characteristics of the Positivism of Comte, which influenced and determined, to a high degree, the development of French philosophy during the nineteenth century. It is certainly incorrect to speak as if Positivism exercised an absolute sway. As we shall see, other intellectual tendencies asserted themselves before Positivism and co-existed with it. But it is true that Comtian thought was the " élan vital " of many of the most

typical philosophical surveys and activities in the second half of the nineteenth century in France: the attack on metaphysics, the low esteem in which metaphysics was held, the worship of the mere facts of phenomena, the adoration of experience and proof, the unswerving trust in science, the glorification of the benefits of science, the strictly scientific investigation of ethical and social phenomena, and so forth.

It is not our present task exhaustively to criticise the followers of Comte. We shall merely point out the most typical elements in the aims of the leading representatives as far as is necessary for the adequate presentation of the movement as a whole.

Without overrating the importance of *Littré* (1801–1881) in philosophy, we are bound to give him our serious attention as the first conscious continuer and propagator of the Comtian Positivism. This is especially necessary, as he seeks to exclude from positive philosophy all questions which cannot be subjected to experimental proof. Certainly, Littré declares, with Comte, that he takes his stand on ground beyond the antithesis of Materialism and Spiritual Idealism. But in reality he approaches closely to Materialism. This may well be the reason why he was not willing to follow his master in the second stage of his intellectual development. Thus in his famous "Dictionnaire" he defines the soul as "anatomically, the sum total of the functions

of the brain and the spinal cord: physiologically, the sum total of the functions of cerebral sensation." Thinking he considers as a function of the body; feelings, thoughts, volitions, as phenomena of the brain. Yet there are views expressed by Littré which make it impossible to count him on the side of the Materialists. He ascribes to Nature movements which show purpose, for in the preface to Leblais' " Matérialisme et spiritualisme, étude de philosophie positive " (1865), he says that organs can only come into existence through or with a view to an adapting of organised nature to her aims. It is especially in the case of the eye and its structure that Littré is unable to deny this purposefulness.

Unlike Littré, another disciple of Comte, *Pierre Laffitte*, remained loyal to the master, even in the later stages of his development.

Far more important for the dissemination, continuation, and application of Comte's ideas and method are the efforts of two men who, while not Positivists in the strict sense of the word, were deeply influenced by the Positivist movement: *Hippolyte Taine* and *Ernest Renan.*

Taine (1828–1893)

A knowledge of Taine's work is of especial importance to us, since on the one hand it con-

sciously adopts as its starting-point the Condillac-Comtian world of ideas and, on the other hand, it is the type of that kind of intellectualism which Bergson has made it one of his chief tasks to oppose. If it is taken into consideration that Biranism is the result of profound dissatisfaction with the teaching of Condillac, it will be permissible to assert that, as Biran is to Condillac, so, roughly speaking, is Bergson to Taine. This comparison, in a measure, gives us the most succinct formula for the changes in French philosophy for the last century or thereabouts. Taine's achievement, like Comte's, has an essentially negative character: it is a reaction against the dominant eclectic-spiritual theories which originate with Cousin and Biran. Taine felt it incumbent on him to lay especial stress on the futility and unscientific nature of those principles which philosophers like Royer-Collard, Cousin, Jouffroy, Damiron, and their followers conceive of as being higher than sense-phenomena. He also dealt faithfully with Maine de Biran in his pamphlet "Les philosophes classiques du XIXième siècle." Taine decisively took the side of Condillac and Laromiguière and pronounced Ideology as "the sole method that is suitable to the French mind."

Certainly Taine does flirt with thinkers like Spinoza, Hegel, Vico, Herder, and Goethe. In

talking of Hegel he is positively dithyrambic. It is undeniable, too, that in his later works in particular traces of the influence of these thinkers are to be found, and even pronounced lapses into Idealism.

Thus in the "Philosophie de l'Art" he admits that in Art it is utterly impossible slavishly to imitate the object, that the artist must exercise a choice and consequently alter the reality as presented to him. He even acknowledges the necessity of metaphysics, or, more correctly speaking, metaphysical analysis, although he limits its scope to Man and the affairs of humanity. The task of metaphysics would consequently be to trace back to a universal formula the laws and types that science has elaborated. Probably influenced by Hegel, Taine repudiates the radical Empiricism of John Stuart Mill; for he identifies the Real and the Rational.

But in spite of this limitation, it is still possible to regard Taine as a typical representative of Empirical Positivism. Our chief justification is the fact that Taine applies to the mental sciences the method of the natural sciences, and claims everywhere to discover or to establish the principle of necessary conformity to Law. The theory of the "Moment" and the "Milieu," which plays a leading part in his teaching, is immediately derived

from Comte. In his "History of English Literature" he openly professes Naturalism: for in the introduction to that work he says: "Vice and Virtue are products, just as much as sulphuric acid and sugar, and every synthetic datum is made up of the combination of other data, on which it depends." In his "Philosophy of Art" he aims at the establishment of fixed laws after an investigation which is at once practical, methodical, and analytical. In Taine's opinion the production of a work of art is determined by laws as exact and necessary as the whole body of the laws of nature. If, in the interpretation of the Art of a century, nationality, environment, the particular artistic impulse, and the individual emotions of the artist are taken into consideration, then it will be possible to infer from general law, not merely the revolutionary phases and general forms of the human imagination, but the differences in the national schools, the unceasing variety of different styles, and even the fundamental characteristics of every great artist's work. In all this Taine allowed the spirit of systematic partiality to carry him so far that even Zola saw himself forced to react against his unbridled Determinism.

Among Taine's works our attention will be above all directed to his chief philosophical production "De l'Intelligence" (2 volumes, Paris, 1870), for

not only is it in some respects the basis of experimental philosophy in France, but the views represented in it have to a large extent evoked Bergson's attack on the prevalent psychology, so that one is justified in saying that " Matière et Mémoire " is an exact opposite to " De l'Intelligence." Starting from the conviction that our perceptions are real facts, Taine endeavours to make psychology a science of facts. With this end in view he adopts the method of reduction, which consists in investigating the most minute elements of knowledge, their origin, the manner and conditions of their combination, and their constant effects. In this undertaking Taine relies on the doctrine of Condillac, according to which all our general conceptions may be traced back to Signs, on the scientific induction of John Stuart Mill, and on Bain's doctrine of the perception of space. He arrives at an intellectual atomism, which explains the mind as nothing else than a flux and a bunch of sensations and propensities, which seen from another aspect are a flux and a bunch of nerve vibrations: in short, the intellectual life is a continual transformation of sensations. Association plays a large part in this. Sensation is, as it were, the limit of the intellectual world. Without regarding intellectual phenomena as a function of the nerve-centres, Taine represents a school of thought which

approaches that of psycho-physical parallelism: sensation and the inner movements of the nerve-centres are in the nature of things one single process, which appears as double, because it is apprehended in two different ways. In conscious opposition to Biran and the "Metaphysicians" in general, Taine affirms that Subject, Soul, Ego, Force, are nothing but metaphysical entities, mere figments of the brain, begotten of words. Force is nothing else than the incessant blunting of a process in conjunction with the process that follows it. The Ego contains nothing but these processes and their combinations. Memories are pictures, *i.e.* the resurrection of former sensations, real hallucinations, *i.e.* illusions which lead to perceptions. All the abstract and general concepts of the True, the Good, the Beautiful, are preliminary frames ("cadres préalables") which we make things fit into. Taine summarises thus: our knowledge is made up of general judgments, which are dual sets of general concepts. General concepts themselves are psychic images, which are produced by a definite class of experiences. A psychic image is a sensation which spontaneously recurs. A sensation is a combination of simple elementary sensations: these last are compounded of still simpler elements, and so on, until infinitesimal sensations are reached, absolutely similar sensations, which by their varied

combinations cause the variety in collective sensation. This is the standpoint of consciousness, which is inward and immediate. There is another standpoint, that of the senses, which is outward and mediate: according to this the preliminary processes consist of molecular movements of the brain-cells. These are the materials of our intellect, and such is the way in which they are adapted to each other. Taine opened up new avenues for the later evolution of psychology in France by asking for particular and accurate monographs dealing with the beginnings of speech and other psychic phenomena in children, with the experiences of artists, with the phenomena of somnambulism and hypnotism, with spiritism and dual personality: all these he thought would serve as a basis of psychological research.

Renan (1823–1892)

Renan is not, in the same sense and to the same degree as Taine, a continuer of the Comtian Positivism. But he too is dominated and inspired by his generation's belief in the omnipotence of positive knowledge, of scientific method, of experience and the laws of nature. He too was influenced by German philosophy, and especially by Kant and Hegel. But in reality he draws his inspiration

from Comte. In him the influence of Darwinism is more clearly perceived than in Taine. More definitely than Taine does he stand for the principle of the relativity of Knowledge, and he denies the "raison d'être" of metaphysics, nay of philosophy itself, as an independent science. Fundamentally his attitude is that of the sceptic. He does not absolutely disavow metaphysics: he merely asks that metaphysics shall make no claim to true knowledge of reality. Consequently Logic and Metaphysics are not independent and progressive sciences, but only complexes of immutable concepts: they teach us nothing: they merely aid us to analyse what we knew already. In Renan too it is correct to speak of some real Hegelian influence. Severely as he criticises Comte in general, his relativist doctrine of Becoming did not owe its origin to the spirit of the Hegelian "Process"; it is a carrying on of the Negativist Positivism. This holds good also for Renan's conception of History as "the sacred science of mankind."

It is especially important for us to get a firm grip of the fact that Renan's most typical endeavours rest on a belief in the omnipotence of precise scientific knowledge: to this firm belief they owe their inspiration and their enthusiasm. In youth and age alike he held firmly to the conviction that science alone can help us to realise the ideal of a

better humanity.[1] Under the influence of his master, Eugène Burnouf, he learnt to place science above philosophy, and to win the highest results from the conscientious analysis of single phenomena. So philosophy is not an independent science, but a side of all the sciences. Renan is firmly convinced that the individual sciences will be adequate for the solution of the problem of things, so that a time will come when Man will know the metaphysical-intellectual world exactly as at present he knows the physical world. Thus, for example, the problem of man's origin will be solved with the help of the following sciences: Ethnography, Chronology, Geography, Physiology, Psychology, and History. Closely connected with this is Renan's aristocratic *intellectualism*. He says emphatically: "Le savant seul a le droit d'admirer." Like Taine, Renan looks upon *analysis* as the world-historical mission of the French type of intellect. At all events he believes that science can make men happy, *i.e.* perfect. Then Religion has no further "raison d'être." Science is already in our own age the true religion, while what we generally term religion is sheer hypocrisy. It is right for Renan to avow: "Ma religion, c'est toujours le progrès de la raison, c'est-à-dire de la science." Certainly in riper years

[1] Cp. especially the preface to the 8th edition of "L'Avenir de la Science," Paris, 1894, C. Lévy.

he broke away from the extravagant optimism of his youth: he never lost his belief in the power of science. This fact must never be disregarded if Renan's attitude to History is to be understood. Certainly Renan eulogises the service rendered by Hegel to the philosophy of history, for according to Hegel History is not a succession of isolated events, but an incessant progress, an unfolding towards the Ideal. But Renan's conception of Becoming, over and above the influence of Hegel, is also more or less immediately affected by Darwinian Evolution and Comtian Positivism. Of supreme importance for Renan is Man's obedience to *laws* which regulate his movements. Hence the great importance he attaches to the investigation of *Becoming* in all branches of knowledge. Thus Psychology is bound to investigate, in the individual as well as in mankind, the Becoming of the life of the soul. In this respect Renan is a pioneer of child-psychology, and above all of the psychology and sociology of primitive man, of which investigations Durkheim and Lévy-Bruhl are the leading exponents at the present day.

In the case of the well-known physiologist and psychologist—the founder of metapsychology—*Charles Richet* (1850–), the predominance of the anti-metaphysical and Positivist tendency is more clearly marked. Thus in 1892 he announced in

definite terms the demise of metaphysics: "Metaphysics will probably be abandoned altogether. . . . Philosophy properly so called will cease to exist, its metaphysical side will become the sphere of the astronomer, the mathematician, and the physicist, while the psychological side will be the physiologist's share." [1] In accordance with this prophecy Richet endeavoured to merge psychology in physiology. He interprets all psychic phenomena as the perfecting, in a graded scale, of physiological functions and phenomena: he reduces quality to quantity; essential differentia he resolves into differentia of degree and complexity. Certainly, Richet does not absolutely refuse to allow any value to inward observation. He thinks, however, that such observation can only be aware of the phenomena of consciousness. Further progress can only be made by experimental science, with its strict methodical procedure, its exact measurements, and so forth. Richet would like to apply the Cartesian Mechanism, not merely to animals, but to man. He is not far from Lamettrie's "Homme machine" when he says, "If animals are mechanism and nothing more, we are just the same." [2] Descartes had penetrated deeply into the essential nature of animals in showing

[1] "Dans cent ans," Paris, 1892.

[2] "Essai de psychologie générale," Paris, Alcan, 18th ed., 1912.

that the actions of animals are strictly determined by their nervous mechanism. This is also true of Man. In the animal, as in Man, every activity is determined by necessary conditions, inexorable laws; laws of reflex action, inhibition, stimulus, association. It is quite impossible to speak of the life of the intellect as having primary existence: it is equally impossible to speak of it as independent. The whole life of the intellect has its origin in the humblest mechanical beginnings. What is supposed to be the "Higher" can in all cases be explained by the "Lower." Note carefully that for Richet the point at issue is, not so much the extension of the Psychic to cover the whole world of living things, but rather the rediscovery of the so-called Cartesian Mechanism in Man as well as in animals.

Théodule Ribot (1839–1916)

Through the instrumentality of Taine and Renan, Positivism made considerable progress in France, and is to-day in the highest degree a living force in certain typical works, in Psychology, the Theory of Knowledge, Sociology, Ethics, and so forth.

In this respect it is especially the work of *Théodule Ribot* that has opened new ground and marks a new epoch. In his own works and in the "Revue Philosophique," which he founded in 1876, he has endeavoured, especially in the sphere of psychology,

systematically to carry out Taine's suggestions and to meet his demands, on the basis of intensive and conscientious accumulation of facts: in this aim he has also been influenced by the views of Claude Bernard, Dastre, Vulpian, Charles Robin, Caro, and Lachelier. In the first place then he stands for the emancipation of the individual philosophical sciences from metaphysics. Contrasted with metaphysics, which is merely subjective, positive science must be objective. That and that alone can be strictly called *scientific* which can be measured, verified, proved, established, and formulated in Laws, and is consequently independent of place and time and individual caprice.[1] Applying this principle to *psychology*, Ribot holds that psychology must be made *independent* of all metaphysics: otherwise it has no scientific value. The sphere of psychology is the sphere of facts, which are presented to us through practice and experiment. The question of the real nature of the soul has nothing to do with psychology. Psychology must be founded on close and unhurried observation. Construction is beyond its scope.[2] The value of self-observation is indeed incontestable: but the testimony of

[1] Of fundamental importance for all these views is Ribot's work "La psychologie anglaise contemporaine." I am quoting from the 3rd ed., 1901, Paris, Alcan, Introduction, pp. 17–21.

[2] *Ibid.*, pp. 24–5.

consciousness is insufficient: psychology must be spread out to include other persons. It can only make a real advance by seeking laws and employing inductive methods. So it is bound to investigate the psychic phenomena of animals and primitive man.[1] Phenomena, their laws and their immediate causes, facts from every department—these constitute the subject-matter of psychology; the mechanics of sensation, the conditions of memory, the effects of imagination, the association of ideas, dreams, trances, hallucinations, madness, imbecility, the history of languages, the history of races, and the like. The objective method introduces into psychology the idea of progress and evolution: it makes comparative psychology possible.[2] To attain this end what is most needed is not collective studies of generalities, but the accumulation of monographs and treatises on special points.

These views, which Ribot reached after an intensive study of the English psychology of the nineteenth century, form as it were the plan which he has striven to realise throughout his whole life. For undoubtedly Ribot finds himself in agreement with the characteristic views of English psychology, as representing which he discusses Hartley, James Mill, John Stuart Mill, Herbert Spencer, Bain,

[1] "La psychologie anglaise contemporaine," p. 25.
[2] *Ibid.*, p. 429.

George Henry Lewes, Bailey, and others. Thus Ribot appears to join with English psychologists in assuming that the most general of all the laws which govern psychological phenomena is the law of association. Ribot is also in agreement with English philosophers in his insistence on the inductive method. Finally, he demands that psychology shall be based on physiology, if it is to become the foundation of the intellectual, social, and political sciences.[1] Certainly, Ribot rejects the "epiphenomenal" conception of consciousness: he recognises the individuality of psychic phenomena. But in general he adheres to the Positivism of Comte and Taine. He is dominated by the scientific optimism of the nineteenth century. For him the model for psychology is the method of measurement employed in the natural sciences.

To do Ribot full justice, consideration must be given, not only to the writings of his first period ("Psychologie anglaise contemporaine"; "L'hérédité," 1873; "Psychologie allemande contemporaine," 1879), but also to the works of his second ("Maladies de la mémoire," 1881; "Maladies de la volonté," 1884; "Maladies de la personnalité," 1885; "L'Attention," 1888) and third periods ("Psychologie des sentiments," 1896; "Évolution des idées générales," 1897;

[1] "La psychologie anglaise contemporaine," p. 429.

" L'imagination créatrice," 1900; " Logique des sentiments," 1905; " Les passions," " Problèmes de psychologie effective," 1910; " La vie inconsciente et les mouvements," 1917). Consideration of the progress of experimental psychology has led him to break loose from the antieclectic attitude which embraces all the sciences, again to give a place to self-observation, to take a decided stand against the psychology of association and against intellectualism, and in general to assert the importance of the unconscious and the dominance of the passions and the emotional life.

That Ribot, however, through all the stages of his intellectual development always remained loyal to the fundamental ideas of Positivism, is shown by the preface to the compilation entitled, " Traité de psychologie," [1] which he wrote shortly before his death. Here he says that psychology must effect its emancipation from metaphysics, that psychic phenomena must be investigated strictly according to scientific method and that their laws and the conditions of their existence must be established in the same way. As far as psychology is a part of biology, it has nothing to do with philosophy.

Ribot's influence on present-day psychology in France is incalculable. Almost all the psychologists, in varying degrees, begin with his teaching. This

[1] Published by Georges Dumas.

derivation especially applies to the two leaders of scientific-experimental psychology, *Pierre Janet* and *Georges Dumas*, founders of the " Journal de psychologie normale et pathologique." [1]

Janet (1857–) dedicated his great work, " Les obsessions et la psychasthenie," to Ribot. But his first work of moment, " L'automatisme psychologique," [2] is mainly written under the dominant influence of Ribot, although both Charcot and Maine de Biran have done much to determine Janet's path of development. Thus, like Ribot, and following Ribot's example, Janet claims that his own position is beyond the antithesis of Materialism and Spiritual Idealism. He is no more disposed than Ribot to deny the individuality of psychic phenomena. His aim is rather to reach an essentially psychological conception and exposition of nervous disorders, and, as opposed to mere automatism, to lay stress on the preponderance of conscious Being, testifying to free self-determination. Perhaps in this phase the influence of Biran is also traceable. So far from conceiving the Judgment and the Will as complicated forms of lower functions, *i.e.* considering the Consciousness as an " epiphenomenon," he defines it as a creative synthesis. Man's real greatness consists in the action of the will, *i.e.* in free activity. This cannot be foreseen; it is

[1] Paris, Alcan, since 1905.

[2] Paris, Alcan, 1889.

absolutely new, a creation from nothing. This is the fundamental characteristic of Genius, which Janet clearly distinguishes from Madness (= Automatism).[1] Thus, so far as Janet gives expression to the dynamic of the mind and its creative activity, his work is complementary to Ribot's and approaches mental psychology.

And yet we are forced to count Janet among the representatives of the empiric-positivist psychology. Janet expressly affirms that his desire is to apply to psychology the method of the natural sciences, taking no account of any metaphysical assumptions.[2] He wishes to content himself with the observation and accumulation of facts. To obtain simple, precise, and complete phenomena, the field of observation must be in other persons: we must call in the help of *objective* psychology, we must produce a change in a person's state of consciousness in a definite precalculated manner. Hence psychopathology is indispensable. Janet admits that his work "L'automatisme psychologique" is the result of researches that had as their subject hysterical men and women, mental patients or epileptics. The statue of Condillac is constantly before his eyes as a pattern, with this difference, that Condillac's statue is a fiction, whereas the science of to-day permits us to view real living statues, whose

[1] Pp. 476–8. [2] "L'automatisme psychologique," pp. 4–5.

minds are void of thought; and thus a desired psychological phenomenon may be artificially produced.[1]

As for the relation of mind to body, Janet's standpoint may be called that of a psycho-physical parallelism, according to which every movement of the limbs in a living being is accompanied by a process in the consciousness. The same thing is perceived and investigated in two different ways.[2] The ideal of psychology as a science is, for every psychological law, to find the corresponding physical law.

Under the name "psychasthenie" Janet, in his work "Les obsessions et la psychasthenie," has described a mental malady, of which the characteristic is the sufferer's clearly defined consciousness as opposed to his mental and bodily states, *e.g.* "phobias," obsessions, terrors, dread of contact, odd sensations of strangeness, incompleteness, and loss of personality, and so on. In the first, analytical part he examines the three classes of phenomena which seem to him as the translation and psychic expression of psychasthenia: obsessions or delusions, excitability (intellectual, nervous, and emotional), and psychological inadequacy. An obsession is always concerned with action: above all it has to do with the will: it is felt by the patient as a bad thing,

[1] "L'automatisme psychologique," p. 12. [2] *Ibid.*, pp. 482–3.

he submits to it passively, he passes judgment on it, he makes it into a jest. In the second, synthetic part Janet achieves the synthesis of the symptoms he has examined. To prove to what an extent the stigmata of psychasthenia explain all the phenomena of obsession and uncontrollable excitement, Janet sets up a hierarchy of the intellectual functions, according to which the highest intellectual function is the function of the *Real*. In psychasthenia patients the function of the *Real* is wanting; they cannot adapt themselves to the present. They are consequently feeble in action, and symbolise this weakness in obsessions, impulse, and "phobias"; in these they find satisfaction, for they appear to be the explanation and justification of the weakness itself. Janet draws a sharp distinction between psychasthenical and hysterical patients: while the former are always irresolute, carry nothing through, and are deficient in emotional experience, the latter have not the least doubt in the subjective sphere nor in external matters; they translate all their ideas into action; they easily attain the extremest of convictions, just as they carry to the extreme point such negative phenomena as paralysis, lack of sensation, weakness of memory, unconsciousness, and so forth.[1]

We should carefully note that, as in his other

[1] "Les obsessions et la psychasthenie," Vol. I, pp. 7, 34–5.

works, so also in " Les obsessions et la psychasthenie," Janet endeavours to carry out systematically and in detail Ribot's fundamental demand for a unification and reciprocal supplementing of psychopathology and psychology.[1] Instead of using the terms " Neurasthenic " and " Phrenasthenic," Janet employs the more accurate name " Psychasthenic," considering that this word very well expresses the weakening of the patient's psychological functions. As a basis for the studies comprised in this work no less than 325 observations of patients were made : 230 of these were women and 95 men.

That Janet, in spite of changed opinions, still holds to his empiric-positivistic conception of psychology, is clear from the article he published in the compilation edited by Georges Dumas (" Traité de psychologie ") on " La tension psychologique et les oscillations." He hopes that the idea of " tension psychologique " introduced by him will permit the tracing of psychic phenomena back to processes that can be observed from without and can be described through ideas that are taken from external observation : the idea already named will do much to adapt psychology to the framework of the other natural sciences.[2] It will help us to conceive of consciousness as a reaction of the organism

[1] " Les obsessions et la psychasthenie," Introduction, p. vii.
[2] " La tension psychologique," etc., p. 951.

on sensations (réceptions) which are determined by its own processes.[1] Many psychic phenomena, which to-day seem very mysterious to us, would be capable of easy explanation if knowledge could be attained of the efforts towards a definite process, which in various degrees of development come into play in these phenomena. Thus psychology must begin with the study of these efforts and tendencies, by considering them, not as results, but as the starting-point of all ideas and conceptions.[2]

Georges Dumas, even more markedly than Janet, manifests the endeavour to apply to psychology the method of the natural sciences, the empiric-positivist method, and indeed to characterise psychic phenomena as the product of physiological functions. Dumas appeals expressly to Comte and Ribot. He glorifies these philosophers as the masters and originators of a scientific psychology, emancipated from metaphysics. In dealing with Dumas it is hardly possible to speak of him as being immediately influenced by Biran.[3] While pointing to Ribot's

[1] "La tension psychologique," p. 921. [2] *Ibid.*, p. 922.

[3] Dumas began his career as a psychologist with an appreciation of Comte: "Psychologie des deux messies positivistes: St. Simon et A. Comte," 1905. Among the other works of Dumas we may mention his doctoral thesis "Le sourire"; "Traité de psychologie," 2 vols., Paris, Alcan, 1923–1925. But of greatest interest for us is the cyclopædia edited by Dumas, since Dumas, over and above his own monographs on special problems of psychology, defines in a concluding section his own ideas of the meaning and task of psychology.

application of psycho-pathology to the psychology of the normal man as his chief service to the science, Dumas gives us to understand that his aim is to carry on the master's work, so that real progress may be made in this direction. Certainly Dumas' undertaking had found pioneers in his immediate predecessors Gilbert Ballet, Chaslin, Dromard, Dupré, Joffrey, Magneau, and Régis. Among the forerunners of an earlier date may be reckoned Baillarger, Esquirol, the two Fabrets, Moreau de Tours, Pinel, etc., and to a certain extent Maine de Biran.

Under the term " Pathologie mentale " Dumas, in the spirit of Ribot, includes mental disturbances and the organic changes which can be connected with them as causes, accompanying circumstances or effects,[1] especially such disturbances as affect the functions of the brain ; the functions of the intellect, of the memory, of the will, as well as the higher functions of the emotions.[2] In decided contrast to Janet, Grasset, and others, he does not separate mental diseases from nerve-diseases (Neurosis). He classes hysteria and psychasthenia among the psychic maladies (Psychosis). As for the different types of dementia, Dumas believes that dementia and idiocy are similar to each other in respect of their etiology and their psychological characteristics : they testify to an intellectual deficit, and are

[1] " Traité de psychologie," pp. 811. [2] *Ibid.*, p. 812.

explained through a lesion, either inherited or due to a malady developed during the fœtal life—or through a lesion which was not developed during the fœtal life.[1] Amongst the various kinds of dementia Dumas discusses "dementia senilis," "dementia paralytica," and "dementia præcox."

In his dissertation "La psychologie pathologique" Dumas endeavours to interpret and to apply the results of psycho-pathology and nerve-pathology. As the fundamental principle of the pathological method he upholds the essential identity of the normal and the pathological. It has undeniably been proved that even the worst cases of pathological disturbances are invariably nothing more than hyper-, hypo-, and para-divergencies, *i.e.* excess, defect, and degeneration of the normal functions.[2] Hence the vast importance of the study of pathological disturbances for the knowledge of the functions and organisation of the normal intellect. In the Physical as well as the Psychic this is true. Ribot's great merit lies in this, that through mental and nervous diseases he made researches into disturbances of the memory, the will, the attention, and the personality. Dumas applied the same method to his examination of the feelings of joy and sadness, and the expression of the emotions.[3]

[1] "Traité de psychologie," p. 825.
[2] *Ibid.*, p. 1007. [3] *Ibid.*, p. 1019.

Dumas tests the value of psycho-analysis in pathological psychology, and in doing this his attention is chiefly directed to the work of Freud. As the original and enduring contribution of psycho-analysis Dumas points to the doctrine of displacement [1] and symbolism. On the other hand, he finds that the capital importance ascribed by psycho-analysis to the sexual instinct is exaggerated. He also criticises Freud for having assigned too little space to physiology in his explanation of "libido." The Freudian methods have failed to discover the first causes of neurosis and mental disease. After all, Dumas is bound to acknowledge that the application of psycho-analysis to religious, æsthetic, and literary criticism is of positive value for the psychology of the normal man.[2]

For Dumas' general place in philosophy and for estimating the measure in which he was influenced by Ribot the following studies are also important, "Les transformations des tendances" and "L'amour." With Ribot, he regards the intellectualisation of a feeling or an effort as a pause in its development.

It is beyond the limits of this work to attempt an appreciation of the endeavours of Ribot's other followers; but we may select a few names: L. Barat, B. Bourdon, Ph. Chaslin, L. Dugas, and to

[1] "Traité de psychologie," p. 1031. [2] *Ibid.*, p. 1065.

some extent Piéron, Alfred Binet, Ed. Claparède, and Ch. Blondel. We are compelled, however, to give a brief note touching the creative activity of the Geneva psychologist Edouard Claparède, since his work is in a certain measure typical.

Ed. Claparède (born 1873) was originally a nerve-specialist. He was induced to turn his attention to psychology by Th. Flournoy,[1] for whom the Chair of Experimental Psychology at the University of Geneva was founded. In addition to Flournoy, he was influenced by Ribot and Wundt. Claparède's studies are not confined to a single branch of psychology. He is simultaneously interested in experimental psychology and in the general theory of the science (especially in his writings on thought-association and intelligence). He has dealt exhaustively with animal psychology, pathological psychology, and applied psychology (the psychology of testimony, educational and industrial psychology). More decisively than Flournoy and Ribot he stands

[1] *Th. Flournoy* (1854–1920) represents a psycho-physical parallelism which is inspired by pragmatism. For the study of the psychic life he places equal value on external observation, experiment, and self-observation. The influence of Kantian criticism on Flournoy is not negligible. It is thus only with qualifications that he belongs to the first main current of philosophy. His attitude to the problem of Freedom is specially affected by the influence of Kant; on the one hand, in treating of experimental psychology, he makes an axiom of Determinism: on the other hand, in considering the moral consciousness, he decides for Free-Will. In psychology he repudiates metaphysics altogether.

for the emancipation of psychology from metaphysics.

He treats psychology as a natural science, as a part of biology. Like Flournoy, he adopts psychophysical parallelism as a practical principle, while admitting that from the standpoint of philosophy such a principle is unsatisfactory. To this extent Claparède is a Pragmatist. In " L'association des idées " (Paris, 1903) he proves that the psychology of association proves nothing. The basic principle of intellectual activity is not association, but interest: Claparède maintains this view in a paper read before the Conference of Psychologists at Rome (1905). In general he does not consider interest as a mysterious factor: it is a " dynamogenisation " of the useful reaction. The part played by *interest* must be conceived solely in terms of biology. Claparède discovers a rôle for interest in his explanation of *sleep*. In the German Conference of Psychologists at Giessen (1904) he suggested a biological theory of Sleep; according to this *sleep* is not a toxic, but an active reflex function, a kind of defence-instinct. It is not because we are poisoned that we sleep: we sleep that we may avoid being poisoned. In terms of psychology Claparède describes sleep as the failure of interest (désintérêt) in the surroundings present.

In dealing with the problem of Free-Will Clapa-

rède thinks that every attempt at a scientific explanation must assume, as an axiom, Determinism. This does not, however, prevent him from believing in Freedom and Responsibility.

In 1901 Claparède called the attention of French psychologists to the psychology of animals, which was too little known to them. This he did in his article "Les animaux sont-ils conscients?"[1] To escape any metaphysical discussion, in this work too he affirms the principle of psycho-physical parallelism. The most complete of Claparède's works on animal psychology is the article "Tierpsychologie" in the "Handwörterbuch der Naturwissenschaften." Here he characterises animal psychology as a natural complement of human psychology. He adopts the psychogenetic method, which he also applies to the psychology of the child. In these studies, too, Claparède's doctrine of interest has its importance: every animal, at every moment, acts in the direction of its greatest advantage. Claparède ascribes to animals an empiric and unsystematic intelligence. In opposition to Bergson, who selects, as the characteristic property of man's intelligence, the faculty of making and using non-organic instruments, Claparède thinks that apes already possess this conception.[2]

[1] "Revue Philosophique," May, 1901.

[2] Compare, for animal psychology, "Die Methoden der tierpsychologischen Beobachtungen und Versuche." (Frankfurter

In the sphere of psycho-pathology Claparède has evolved from his theory of sleep a theory of hysteria, which explains hysteria as a reaction of defence with regression. He introduces into psycho-pathology the biological and functional standpoint, according to which pathological aberrations must be studied with full consideration of their origin and their utility. In general, Claparède has done much to spread Freudian psycho-analysis in French-speaking circles.

In *Education*, Claparède's biological-functional conception makes itself also felt. Everything demanded from children must be based on a Need. Everything the learner does shall involve the solving of a problem in activity which he has set for himself.[1]

Finally, Claparède's principal work, " Psychologie de l'Enfant et Pédagogie experimentale," [2] is, in a way, an attempt to apply the results of modern research in the psychology and pathology of the Child to the precise and scientific affirmation of certain demands in Rousseau's theory of Education.

In 1912 Claparède and Pierre Bovet founded the " Institut J. J. Rousseau," which may be

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Psychologen-Kongress, 1908) : " Encore les chevaux d'Elberfeld " (" Archives de Psychologie," xiii, 1913) : " La psychologie animale de Ch. Bonnet," 1909.

[1] Cp. " Congrès d'hygiène mentale," Paris, 1922, published in " Education," Feb. 1925.

[2] Geneva, Kündig, 5th ed., 1916.

looked upon as an attempt to apply and realise in practice the views outlined above.

This Institute has done much to spread the auto-suggestion movement, begun by Coué and his disciple Charles Baudouin.

In the realm of *Biology*, *Félix Le Dantec's* conception of Life may be regarded as a typical phase of the empiric-positivist tendency. Le Dantec starts from the fundamental conviction that the phenomena of life can, one and all, be analysed after the methods of physics and chemistry, or, what amounts to the same thing, that Life does not escape the laws of universal mechanics.[1] Obviously, therefore, the hypothesis of a universal consciousness is ruled out beforehand. The whole evolution of living species is governed by the law of the transmission of acquired characteristics, or functional assimilation, " the basic law of biology." [2] Life may be defined by the formula A × B, *i.e.*, as the result of a struggle of two factors: one of these factors is the sum of the conditions of life: the other is the given structural state of the individual, *i.e.*, heredity. Le Dantec maintains with his master Lamarck that the function defines the organ, that it even renews and creates the organ.

[1] " Eléments de philosophie biologique," Paris, Alcan, 1911, pp. 12–13.
[2] *Ibid.*, pp. 30, 46.

There is no room in this theory for final purposes. Le Dantec goes further, and defines Man and the higher animals as a triply-graded mechanism, *i.e.*, as a " mécanisme de mécanisme de mécanisme." [1] It is erroneous to believe that the essential characteristic of life is found in spontaneity of motion. Le Dantec rejects Claude Bernard's idea of irritability as the basic characteristic of life. It is more correct to say that living bodies are lifeless as the rest.[2] Nor is there any essential difference between the physiological and the psychical. One can affirm with a high degree of probability that in every protoplasmatic existence there is a subjectivity which is a true reflection of the phenomena that take place within it.[3] Le Dantec adopts Maudsley's and Huxley's hypothesis [4] of the " epiphenomenal consciousness," following which the consciousness is a reflex, a transient phenomenon, subsidiary and unessential, an " epiphenomenon." The faculty of choice between two different possibilities is a mere delusion. Man is in Nature in the same sense as water or coal are in it.[5] Taking all in all, Le Dantec stands in biology and psychology for a theory of mechanical evolution, the attack on which has been the central point of Bergson's lifework.

[1] " Eléments de philosophie biologique," p. 147.
[2] *Ibid.*, p. 177.
[3] *Ibid.*, p. 223.
[4] *Ibid.*, p. 13.
[5] *Ibid.*, p. 227.

Abel Rey also is beyond all doubt a champion of " Scientific philosophy " in the Comtian-Positivist sense, in spite of his severe criticism of certain over-loyal followers of Comte, and in spite also of the concessions to metaphysics which he made in his later period. Rey is a Positivist to this extent, that he only accepts the teachings of positive science, a science that has nothing to do with explaining the essence of things, which endeavours to show us how to make use of things, and no more. Rey describes his attitude in philosophy as " rationalistic Positivism," " absolute Positivism," " scientism," or, to avoid all ambiguity, as *Experimentalism*, which is founded altogether on experience, but, in contrast to the older Empiricism, on controlled experience, on a result of scientific experiment. At all events this experimental monism gives up all claims to a knowledge transcending experience, to all metaphysics. Scientific philosophy will be no more than a general synthesis of every kind of scientific knowledge. Neither its subject nor its method will be different from those of exact science. Its standpoint will merely be more *general*.[1] In his essay " Vers le positivisme absolu " [2] Rey defines the philosopher as the historian of the

[1] Cp. Abel Rey, " La philosophie moderne," Flammarion, Paris, 1908.

[2] " Revue Philosophique," May, 1909, p. 472.

scientific thinking of his age. His duty is to examine all exact investigators in all departments, in respect of their method and their results, and then to summarise and critically review their work. Philosophy can make no claim to scientific precision, for anything like a verification is beyond its scope. Hence the hypothetical nature of philosophy. Scientific philosophy is essentially a " critique générale." [1]

Within certain limits, the psychological work of *Paulhan* may be looked upon as a continuation of Ribot's. With Ribot, Paulhan would wish to see experiment supplemented by immediate inward observation. In " La physiologie de l'esprit " he stands for the hypothesis of psycho-physical parallelism.[2] Paulhan's psychological philosophy is neither materialistic nor spiritual, inasmuch as it only admits phenomena without a Substance underlying them. It makes an approach, however, to materialism when it asserts that every psychic phenomenon is connected with a physical process, and when it assumes a determinism in physical processes: it draws near to spiritual idealism when it asserts that the intellect cannot be reduced to a mode of motion.[3] In " L'activité mentale et les

[1] Compare, in this connection, Rey, " Eléments de philosophie scientifique et morale," Paris, Cornely.

[2] Paulhan " La physiologie de l'esprit," Alcan, p. 177.

[3] *Ibid.*, p. 183.

lois le l'esprit," 1889, Paulhan sketches a general synthesis of the intellect. As its three chief characteristics he adduces: synthesis of organic and psychic phenomena which are actual social products, the element of the social system, the principle of finality in the universe.[1]

Émile Durkheim (1858–1917)

The most important development from the positivism of Comte and, at the same time, the most systematic application of strict scientific process is unquestionably the "Sociologism" of Emile Durkheim and his school, which, side by side with Bergsonism, is perhaps the strongest power in French philosophy of to-day.

Certainly Durkheim himself expressly deprecates any identification of his own positivism with Comte's positivist metaphysics.[2] So, too, he criticises empiricism, and, in a certain measure, approaches epistemological idealism. He talks of the im-

[1] "L'activité mentale," etc., p. 585.

[2] "Règles de la méthode sociologique," 2nd ed., 1901, 1st ed., 1895, Pref. viii. This work really sketches a programme for the present-day sociological movement in France; its importance may be compared with that of the "Discours de la méthode" for the Cartesian philosophy. Among the other works of Durkheim we may mention: "Le Suicide," Alcan; "Division du travail social," 1st ed., 1895; his chief work, "Les formes élémentaires de la vie religieuse," Paris, Alcan, 1912, and "L'éducation morale," 1925, which appeared shortly after his death.

possibility of referring categories to sensations, the Social to the Individual: he thus repudiates the reductive method, the tracing back of the higher to the lower. He emphatically rejects materialism. He considers his position to be nearer to spiritual idealism than is at first apparent. But he is above the antithesis of materialism and spiritual idealism. He is much more inclined to avow himself a scientific rationalist.[1]

In spite of this, the really individual feature in Durkheim's work is his claim to deal with Sociology as an independent science. Like all the representatives of positivism, Durkheim is held captive by the superiority of objectivity, of precise scientific method based on the external observation of facts. Ideas such as "Method of the natural sciences," "Objective," "Observation from without," "Thing" (chose), etc., also have an absolute value for him, for him especially. Durkheim's so-called Rationalism is essentially, however, Empiricism, for he rejects all inferences from the universal, he sees in the facts of sociology things free from all subjectivity, ruled, like all other natural phenomena, by the law of causation. True, the "faits sociaux" are not material things, but they are things in the same sense and degree as material things, although in another manner; they are known from external

[1] "Règles de la méthode sociologique," Préface, p. viii.

observation. The sociologist must relinquish every metaphysical hypothesis. His attitude is to be the same as that of the physicist, the chemist, the physiologist.[1] To this extent it is possible to define sociology as the science of the objective reality of social phenomena.[2] Social convictions, social transactions act upon us from without; whether we know it or not, they are forced upon us by the mass.[3] Durkheim sets a great gulf between individual and society, *i.e.*, between the inward and the outward.

At any rate the fundamental postulate of Durkheim's sociology is this, that social phenomena shall be treated as *things*. This involves a certain Determinism: so far from being a product of our will, these phenomena depend on external conditions. In this measure the method of Sociology is independent of all philosophy; it regards social phenomena as capable of natural explanation. It applies the principle of causation to social phenomena, and consequently assumes the character of an exact science.

" Les formes élémentaires de la vie religieuse " is best calculated to bring us to understand Durkheim's sociology and to give us insight into his most cherished aims. In this work Durkheim

[1] " Règles de la méthode sociologique," p. xiii.
[2] *Ibid.*, p. xxiii. [3] *Ibid.*, p. 19.

endeavours to explain the simplest and most primitive religion known, the religion of the aboriginal Australian. His chief reason for the choice is that he believes it the most adapted for an interpretation of man's religious nature, *i.e.*, a revelation of an essential and eternal aspect of humanity. Unlike Spencer and Max Müller, Durkheim holds that neither the idea of the supernatural nor that of God can be regarded as the fundamental element of religion. In his opinion, the origin of religion must rather be sought in the Totemism of the Australian "black fellow," as on the one hand, Baldwin Spencer and F. J. Gillen, and, on the other hand, Strehlow have described it. The Totem is the group of material things, which serves as the collective distinguishing mark of the Clan. As a rule, plants or animals, more generally animals, are used as totems. The totem is more than a mere emblem or heraldic shield: it has also a religious nature: it is the type of sacred things. It is forbidden to eat the totem-plant or the totem-animal: this prohibition proclaims them as sacred. Every member of the clan, as such, takes part in the sacred life. Thus every individual has a two-fold nature—man and totem in one. It follows as a consequence that Dualism is a basic element in religion. But Totemism is not merely a cult: it also contains a view of the universe. And that,

again, is an essential feature of Religion. In Totemism, Durkheim discovers the beginnings of the Theory of Knowledge. The " collective " life supplies the preliminary images, on which the categories are based. Totemism, according to Durkheim, does not consist in the adoration of certain beasts, plants, or effigies, but rather in the belief in a nameless and impersonal Power, which is found in every Being, without coinciding with any individual. This Power plays the part of a life-principle and at the same time bears an ethical character. The Totem is the source of the moral life of the Clan. The Power on which the true believer feels himself to depend is no vain delusion: it is in the highest degree effective; it exists as " Society." This is the source of everything holy. The negative cult strives to make the individual sacred by prohibitions (Taboo). The positive cult consists in a direct intercourse of man and the religious powers. Here is the beginning of the effort that every true believer in a mature religion makes his own, to become like unto God. Just as in the manner of Pragmatism Durkheim sees in religion a guide to life. The difference between believer and unbeliever is not abundance of knowledge, but greater power to *act*. Science, according to Durkheim, can never displace religion, for religion is a reality that science cannot deny.

Belief, however, must always have its roots in Life: that is to say, in the particular form of society, and not, as Comte thought, in the revival of memories of the past. This implies as well that, according to Durkheim, all true social life is of a religious nature, and, conversely, all true religion is of a social nature. In both cases we have nothing to do with a feeling of reverence for a super-individual reality. Finally, Durkheim emphasises the super-subjective and super-empiric character of the process of knowledge. In the place of the experience of the mere subject, depending as it does on sense-perception, he would put the experience of the "Collectivity": in the place of the individual, the empiricism of society. And in this "a priority" has no share.

Émile Durkheim's sociocentric system, or, what amounts practically to the same thing, his religious sociology, has had a mighty influence in France. There would be no exaggeration in speaking of a Durkheim School; and this can be said of no other French philosopher of the present day, not even of Bergson. By his professorial activity, and by the founding of the "Année Sociologique" in 1896, he has gathered together a host of capable assistants, who have made it their duty to apply the master's teachings to the manifold phases of social phenomena. Among these we may mention Hubert and

Mauss, P. Huvelin, Lévy-Bruhl, C. Bouglé, H. Bourgin, F. Simiand, Halbwachs, D. Parodi, Lapic, G. Davy, Fr. Rauh, Adolphe Coste, etc.

Lucien Lévy-Bruhl (1857-)

Amongst those philosophers who have carried on the work of Durkheim the most important, without doubt, is L. Lévy-Bruhl. We grant that his origins are not to be found in Durkheim. His work "L'Allemagne depuis Leibnitz" bears witness to immediate German influence. Above all, we can trace the effect of Kant. Not till later did he come into contact with Comte's writings, which gave a most decided inclination to his whole productive activity. A proof of this is his enthusiastic appreciation of Comte in "La philosophie d'Auguste Comte" (Paris, Alcan, 1900). Later on the English Positivists, especially John Stuart Mill, affected his thought: and the trace of Ribot's influence are not to be mistaken. But in the determination of Lévy-Bruhl's sociological views the philosophy of Durkheim had the most permanent and fruitful share. His most characteristic books, "La morale et la science des mœurs," 1903; "Les fonctions mentales des sociétés inférieures," 1910, and "La mentalité primitive," 1922 (all published by Alcan, Paris),

are conceived throughout in the spirit of Durkheim's sociology, although the views of the two philosophers diverge in various points.

In any case, Lévy-Bruhl is the leading representative of the Positivist tendency in French thought of to-day. The very title of "La morale et la science des mœurs" gives a broad hint that we are dealing with a book of the Positivist type. Lévy-Bruhl expressly remarks that he feels himself in absolute agreement with the spirit of Durkheim's "Règles de la méthode sociologique."[1] Comte and Durkheim are his great leaders. He aims at treating Ethics as an exact science, as "physique sociale" (Comte). To the traditional Ethical theory, "metamoral," he opposes the science of morals. Instead of evolving in thought a system of Ethics, he limits himself to the investigation and description of moral phenomena (faits), rejecting all assumptions, and employing the method of natural science, just as Durkheim's scientific sociology demands in the observation of social phenomena.[2] The real task is to learn the practical science, *i.e.*, to gain possession of a certain number of *laws* governing these facts. Not till then may we hope to change the nature of these moral phenomena through the rational application of scientific know-

[1] "La morale," etc., p. 14.
[2] *Ibid.*, p. 8.

ledge.[1] Like all Positivists, Lévy-Bruhl has a firm belief in the liberating power of knowledge. Following the example of Durkheim, Lévy-Bruhl lays stress on the *objective* method, the method of natural science.[2] It is not the province of moral science to determine what is to be: its duty is to analyse and to establish laws, always relying solely on experience. With this end in view, the *historical sciences* will have approximately the same part to play in "la physique morale" as the mathematical group in the natural sciences. The historical sciences must be to moral science what experiment is to experimental psychology.[3] Morality is just as little in need of "foundations" as "nature" in the physical sense of the word.[4] Interpreting Comte through Durkheim and carrying his teaching further, Lévy-Bruhl stands for a sociocentric conception of the totality of human life. Finally, Lévy-Bruhl hopes that "L'art rationnel moral" will be more humane than the current practical morality, which presumes to force on all mankind the morality of civilised man as known to-day; thereby producing intolerable hypocrisy.[5]

The second standard work of Lévy-Bruhl "Les fonctions mentales," etc., consciously undertakes the work of proving and establishing Durkheim's

[1] "La morale," etc., p. 9. [2] *Ibid.*, p. 30.
[3] *Ibid.*, pp. 126, 177, 180. [4] *Ibid.*, p. 192. [5] *Ibid.*, p. 279.

sociocentrism and sociologism. It seeks to prove that all social or collective phenomena have their origin and their being without any dependence on the individual, that they are even forced on the individual from without. Another central idea of the book is this, that the intellectual functions of the individual are most intimately connected with the whole structure of a definite social reality, and that as a result the intellectual functions of Primitive Man, or, more correctly speaking, of the "lower social organisms," are radically different from our own. They manifest a fundamentally *mystical* tendency, *i.e.*, they bear witness to a belief in forces, influences, effects that really exist, although they are beyond sense-perception. The very reality in which primitive man moves and has his being is mystical. For the primitive man, who, for example, belongs to a society of the totemistic type, every animal, every plant, every single object, sun, moon, etc., is part of a totem, of a class or sub-class. Similarly, in the human body, each organ has its mystical significance. The heart, the liver, and the other animal organs give a definite character to the man who eats them.[1] This much is evident, that primitive man's perceptions are in no way like our own, for in him physico-psychical phenomena are under the immediate influence and ascendency of

[1] "Les fonctions mentales des sociétés inférieures," p. 33.

collective ideas.[1] The same is approximately true of dreams. Primitive man's mentality is largely unreceptive as regards experience, for experience loses its power when pitted against a belief in the properties of fetishes that can confer invulnerability. Everywhere primitive man discerns the action of Spirits on other Spirits.[2]

The greatest part in the mentality of primitive man is played by the *Law of Participation* (loi de participation). Through this law Lévy-Bruhl explains almost all the mental functions of primitive man.[3] This law is at the base of all combinations and pre-combinations of ideas. And thus, in the collective ideas of the primitive mind, objects, living things, phenomena, may, in a manner that is quite unintelligible to us, be at the same time themselves and something else. To this extent, then, primitive man's mentality is not merely mystical; it is also pre-logical, not, however, anti-logical or non-logical.[4] Primitive man sees no necessity to abstain from self-contradiction. With him, more than with us, the whole intellectual life of the individual is *socialised*. Pre-logical mentality analyses but little: it is essentially *synthetic*.[5] In short, the uniformity of primitive mentality is a reflection of the uni-

[1] "Les fonctions mentales des sociétés inférieures," pp. 37–8.
[2] *Ibid.*, p. 65.
[3] *Ibid.*, p. 76 *sqq.*
[4] *Ibid.*, p. 79.
[5] *Ibid.*, p. 114.

formity of the social structure to which it corresponds, which it expresses.[1] Hence arises the amazing queerness, for us, of the method by which primitive man *classifies* living things and objects in general. This, too, is pre-logical and mystical, and obeys the law of participation, so that there exists complete identity of the One and the Many, of the individual and the species.[2] The close inner connection between the *language* of primitive man and his mentality will be readily understood. Thus the Plural is expressed by a Dual, "Trial," and so forth (duel, triel, quatriel, etc.). Primitive man's vocabulary is much richer than our own. He has a copious store of proper nouns. For pre-logical mentality number is not to be separated from the objects counted.[3] Further, the actions of primitive man correspond to his institutions and to his way of thinking. Thus, in hunting, the game must be decoyed by special magic actions. Illness is conceived of in a mystical manner as the product of an invisible factor. Hence the mystic treatment of the patient. The same is approximately true of death. Dealings with dead and living are alike. So, too, there is a mystical conception of birth. To summarise: Lévy-Bruhl sees the real progress of civilisation in the advance from Mysticism to

[1] "Les fonctions mentales des sociétés inférieures," p. 115.
[2] *Ibid.*, p. 148. [3] *Ibid.*, p. 219.

Rationalism, to Empiricism, and to Positivism of the Comte–Durkheim type.

In his last work, "La mentalité primitive," Lévy-Bruhl examines the primitive idea of *causation*, and the effect of this on primitive man's actions. He proves that to primitive man all creatures and all objects are seen in a network of mystic participation and exclusion. The supernatural is such a constant factor in his life that it affords him an explanation of all that happens, as quick and as rational as that given to us by the known forces of nature. To primitive man a profound causal connection does not exist.[1] A mentality that deals with mystic pre-combinations (préliaisons) perceives in what we call Cause nothing more than an event, or, to speak more correctly, an instrument in the service of occult forces. Death, then, is a result of the operation of some mystic force.[2] We can actually see in Lévy-Bruhl an effort to emphasise a certain identity or analogy between this primitive mentality and the doctrines of Bergson: *e.g.*, when he says that mystical pre-combinations resemble intuition, or that primitive mentality admits many "données immédiates," to which we refuse all objective value.[3] Lévy-Bruhl distinguishes three types of invisible influence that dominate primitive

[1] "La mentalité primitive," pp. 17–18.
[2] *Ibid.*, p. 30. [3] *Ibid.*, p. 48 *sqq.*

mentality: the spirits of the dead, spirits in general, and enchantments that proceed from the action of a wizard. Whereas with us cause and effect are both given in time and almost always in space, primitive mentality assumes that at each moment only one of the two series can be apprehended, that is to say, effect: the other belongs to the totality of beings invisible and beyond our perception.[1] Primitive man's conception of time approaches a subjective feeling of duration in the Bergsonian sense. The "intellectualist" conception of time as a homogeneous milieu, disputed by Bergson, is unknown to primitive man.[2] Thus, to give rather crude expression to Lévy-Bruhl's thought: Bergsonism is a reversion to primitive mentality.

Primitive man's notion of dreams, witnessing as it does to the identity of the visible and invisible world, is typical of his mentality. What happens in a dream is true in principle. Actions committed in a dream are subject to responsibility.[3] Predictions (présages) as well as dreams give primitive man hints as to the activity of mystical forces. The signs given by birds or other animals are not wholly and solely hints, warnings, peeps into the future, but causes at the same time.[4] Where we should hold an inquest, primitive man asks questions of

[1] "La mentalité primitive," pp. 51, 72. [2] *Ibid.*, pp. 90–3.
[3] *Ibid.*, p. 102. [4] *Ibid.*, p. 365.

Fate.[1] Primitive man's implicit faith in *Ordeals*, especially the Ordeal by Poison, has nothing to do with a divine judgment. The ordeal is a mystic transaction whose object is the discovery of the enchanter, his suppression, and the destruction of the evil principle inherent in him.[2] Not only the causes of *disasters*, but also those of *success*, have a mystic interpretation. Thus the help of the unseen powers is indispensable for agricultural work.[3] For this, too, female labour and the mystical influence of ancestors are beneficent.[4] White men are regarded as wizards who can bring death and disease, thanks to the mystic powers ascribed to them. The effect of medicines is due, not to natural properties, but essentially to mystic influences.[5] With a mystic influence of this kind primitive man's eternal hatred of the New is closely connected, his "misoneism," and as a further consequence the duty of loyalty to tradition.[6]

At this stage we should like to make a brief reference to the other French writers who, at the present day, represent tendencies that are essentially positivist-sociological.

C. Bouglé can only be called a disciple of Durkheim in quite a limited sense. Following Durk-

[1] "La mentalité primitive," pp. 214, 225. *Ibid.* p. 275.
[3] *Ibid.*, p. 365. [4] *Ibid.*, p. 362.
[5] *Ibid.*, p. 439. [6] *Ibid.*, pp. 448, 464–5.

heim's example, he aims at an objective sociology and proposes to deal with social phenomena from without, as things. He, too, is fascinated by the glorious word " scientific." Convinced in his soul that Life as a whole is determined by the forms of society, Bouglé indicates as the task of scientific sociology the observation of social forms, their causes and effects.[1] With this end in view, Bouglé rests on the teaching of Simmel and Durkheim. In dutiful compliance with the demands of empiric Positivism, he maintains that the most suitable method for scientific sociology is the application of experience. Thus in his work " Les idées égalitaires " (Alcan, Paris, 1899) he arrives at the conclusion that ideas of equality are closely bound up with social forms peculiar to Western European civilisation. For it is an unassailable psychological fact that societies which attain unity by increasing their complexity must make men's minds ready to welcome ideas of equality.[2] Historically, too, " equalitarianism " is found in connection with definite social forms. Certainly Bouglé does not deny that the idea of equality is in itself the soul of the great revolutions of modern times, and that it consequently modifies social forms. But Bouglé

[1] Bouglé, " Qu'est-ce que la sociologie ? " Paris, Alcan, 1907, pp. 30–31.

[2] " Les idées égalitaires," pp. 36–7.

attaches the greatest importance to the demonstration of the truth that the idea of equality is far from being the sole cause of our social forms, that it is rather to be considered as one of their consequences.[1]

In his "Essai sur le régime des castes" the same basic principles are again found. Founding his argument on historic facts, Bouglé endeavours to trace back the caste-system, a system diametrically opposed to Western ideas of equality, to certain definite social forms of the Eastern world. At the same time he proves the affinity of this and similar social forms, the Guild, the Clan, the Class. The fundamental characteristic of the caste-spirit, according to Bouglé, is the sentiment of repulsion for common civic groups; typical also are priestly rule and hereditary specialisation. While Bouglé shows in "Les idées égalitaires" that Equalitarianism, *i.e.*, Democracy, has accelerated the progress of civilisation, in the "Régime des castes" he dwells emphatically on the evil effects of the caste-system as a hindrance to progress.

Gustave Belot[2] criticises the sociologism of Durkheim and Lévy-Bruhl with severity. The endeavour to establish, as imperative and obligatory, ethical principles which in respect to special unstable

[1] "Les idées égalitaires," p. 214.
[2] "Études de morale positive," Paris, Alcan, 1907.

social conditions are regarded as relative, seems to him contradictory. So, in face of Durkheim and Lévy-Bruhl and their sociological Positivism he would restore the individual consciousness to its rightful part in moral science. The so-called "scientific method" in Ethics he looks upon as presumptuous, even as impossible. In the importance he assigns to the critical spirit and the idea of compromise Belot consciously steps aside from the orthodox path of Positivism.[1] The "positive" or "rational" ethics that he aims at is opposed equally to "a priori" and to "empirical" ethics.

Yet Belot may be counted as an adherent of empiric-antimetaphysical positivism. With him, too, the idea of objective reality plays a central part. He, too, is firmly convinced that speculation "a priori" is no foundation for a positive system of ethics, or, more correctly speaking, an "art of ethics" (technique morale). In his opinion there is a great similarity between scientific actions and scientific technique.[2] The characteristic point of an applied science is this, that it never demands the cause of anything that occurs; it merely asks for the effect.[3] And this is also true of Ethics. In adopting this essentially pragmatistic attitude, Belot considers himself equally opposed to Durk-

[1] "Études de morale positive," Avant-propos, iv–v.
[2] *Ibid.*, p. 62. [3] *Ibid.*, p. 78.

heim's sociologism and to the Historical School. In spite of all his attacks on Durkheim and Lévy-Bruhl, Belot admits that the ethical system he aims at may be strictly sociological. He attempts to discover how far moral science may be based on the application of an analytical-causal knowledge of different social organisations, and consequently how an applied science may be created which shall bear the same relation to sociology as Medicine to the biological sciences.[1] True morality is not a completed whole: it is waiting to be created: it is essentially an " art moral rationnel " that the future has in store.

With all Belot's criticism of scientific ethics, he is still dominated by the scientific enthusiasm of the last century; this is evident from his conception of rationality in ethics, as the characteristic of which he assigns Universality and Objectivity. He would bring the Rational and the Social together by means of utility, according to which true autonomy is that which is based on utility. Rationality is essentially social, not because reason proceeds from the social organism: on the contrary, because reason is striving towards the social organism.

Durkheim's influence is strongly felt in the work of the best known of present-day French writers on Æsthetics, *Charles Lalo*.[2] His position is

[1] " Études," etc., pp. 95, 105.

[2] Cp. specially: " L'esthétique expérimentale contemporaine,"

thoroughly that of the Positivist-Sociological school. His aim is to raise Æsthetics to an exact science, to a system of relations. He will have nothing to do with any sentimental, anti-intellectual, mystical, individualist conception of Æsthetics. If Æsthetics is to be a science, it must proceed experimentally, sociologically; it must establish laws, and treat phenomena (faits) as things. This position assumed by Lalo, essentially sociological, forces him to take exception even to Fechner's experimental æsthetics, although he himself is powerfully influenced by Fechner. He finds that Fechner's numerous "Principles" are scholastic entities. Lalo would aim at correcting Fechner through Durkheim, by conceiving the æsthetic phenomenon as, essentially, a social process: "the form of the idea of Beauty is that of an imperative; of an authority imposed by virtue of a social organisation, an authority capable of establishing values." [1] Lalo stands for an absolute system of æsthetics. Hence his attack on Guyau's æsthetic vitalism and its interpretation of the Beautiful and of Art in general, and in a certain measure on the æsthetic theories of Séailles and Bergson. Neither intellectualism, nor sentimentalism, nor sensualism: such is the solution afforded

Paris, Alcan, 1910; "Esquisse d'une esthétique musicale scientifique," Paris, Alcan, 1908; "Les sentiments esthétiques," Paris, Alcan, 1910.

[1] "Esthétique expérimentale," p. 202.

by scientific-positive æsthetics. Systematically to investigate æsthetic thought, with the help of the data afforded by every science, from mathematics to sociology, neglecting none of them, and as far as possible from these different points of view to create a philosophical synthesis: such is the ideal programme of the æsthetics of the future.[1]

The work of *Frédéric Rauh* (1861–1909), moral philosopher and psychologist, is essentially diversified in its character. In the positive and negative sense alike he was a mirror of the various philosophical tendencies of his age. He passed through different phases: he "evolved." And yet it is possible to range him among the representatives of the main empiric-positivistic tendency.

Rauh began his philosophical career as an enthusiastic champion of metaphysics. "Essai sur le fondement métaphysique de la morale"[2]—such is the title of his doctoral thesis, which he dedicated to his master, Émile Boutroux. This work also bears marks of the influence of Lachelier and Ravaisson. In this essay Rauh severely criticises the attempt to find a basis for ethics in naturalism. In opposition to that theory, he maintains that the only real certitude is the Idea, the Invisible, and that consequently there can be no ethics without

[1] "Les sentiments esthétiques," p. 273.
[2] Paris, Alcan, 1890.

metaphysics, without the search for an Absolute which is the type of every being,[1] that morality is "métaphysique en acte." And by morality he understands the moral action itself, which is consequently true knowledge.[2]

In Rauh, however, this outburst of enthusiasm for metaphysics was of no long duration. He was profoundly affected by the scientific spirit, the "experimentalism" of the age. It is true that he is an avowed adherent neither of Comte's Positivism nor of the Sociologism of Durkheim and Lévy-Bruhl: he criticises both schools. Still more forcibly than Belot he defends the rights of the individual as opposed to the society: he lays the greatest emphasis on the personal-creative character of morality. He regards ethical decision as an absolutely personal affair, which has as its stage the consciousness of the individual. He will hear nothing of invented systems, for the "honnête homme"—the fundamental conception of Rauh's moral philosophy—is never passive, and never lends a mere passive obedience to the social precept. Morality is sometimes discovery, sometimes indignation; at least it is initiative. But for us the important point is this: Rauh's most characteristic works are anti-metaphysical.[3] In them he stands

[1] "Essai sur le fondement," etc., p. 4. [2] *Ibid.*, p. 9.
[3] Cp. "De la méthode dans la psychologie des sentiments,"

for an out-and-out Empiricism. The centre of the whole argument is the conception "experience morale." Rauh assumes a moral experience, analogous to the experience of a precise investigator, and yet "sui generis" and not to be referred to exact scientific experience. He talks of an "attitude morale scientifique." At any rate, he is of opinion that experience must precede all ethical theory and speculation.[1] The matter for moral reflection is afforded by the newspaper, the street, human life itself, and the daily struggle.[2] That is the real positive-scientific attitude: it is a union of idea and fact. The "honnête homme" is, like the scientist in the laboratory, formed by the practice of the experimental sciences: he goes out to conquer life, just as the scientist aims at the conquest of nature.[3]

The sociology of *Espinas* (1844–1922) is essentially positivist in its outlook, in spite of all his efforts to find a common ground with Spiritual Idealism.[4] His chief work owes its existence entirely to the influence of Comte and Spencer; it

Paris, Alcan, 1899. "Psychologie appliquée à la morale et à l'éducation," Paris, Alcan, 1900; "De l'expérience morale," Paris, Alcan, 1903—perhaps his chief ethico-psychological work.

[1] "Expérience morale," p. 7.

[2] *Ibid.*, pp. 236–7.

[3] *Ibid.*, pp. 238–9.

[4] Espinas' chief work is "Sociétés animales," Paris, 1876. We may also mention: "La philosophie sociale au XVIIIième siècle," "Les origines de la technologie."

is the attempt to found a system of sociology on bases which are at once biological and positive-scientific. Espinas proceeds from the conviction that in mankind the laws which govern the formation of social organisms are the same as in the whole animal world. Community of life is known to all living things. If, then, we would discover the scientific laws of communal life, we must look for its manifestations as far as possible in the whole scale of animal life.[1] This involves no disparagement of mankind. On the contrary, if the laws of communal life in animals are established, it will be found that animal societies cannot exist without respect for the rights of other individuals, without co-operation. Amongst the other social phenomena that Espinas observes in communal organisms of animals may be mentioned: generation through epigenesis, division of labour, attraction and co-ordination of similar parts, spontaneity of governing impulses, the universal nature of social phenomena, determinism, and so forth. Espinas anticipates Durkheim's sociology when he proves that animal communities are living things, having a life of their own, and distinct from others. This, however, is true only within certain limitations, for Espinas, in opposition to Durkheim, considers social processes, not as something "sui generis," but

[1] "Les sociétés animales," p. 10.

as essentially a progressive modification of individual processes.[1]

Durkheim's achievement in establishing the independence of the social process had a way prepared for it in the sociological works of the Russian writer *de Roberty*, of the Belgian *de Greef*, and, above all, of *Jean Izoulet*. In his leading work, "La cité moderne" (1894), Izoulet stands for a bio-social hypothesis which claims that language, thought, morals, art, and so forth, all originate through the formation of social organisations (association). But, unlike Durkheim, Izoulet discerns in the individual the true inventor and creator of social processes, and the fountain-head of all true progress. Society offers the individual the ground and the foundation for his own development.

In the *Philosophy of History* the spirit of empiric Positivism asserts itself in the works of *Henri Berr*. In his doctoral thesis, "L'avenir de la philosophie, esquisse d'une synthèse des connaissances fondée sur l'histoire," [2] Berr is under the spell of that scientific imperialism which deems that the age of metaphysics is past, since all metaphysical problems can be solved by the aid of exact science. He believes the historic method to be omnipotent, and regards the problem of unification as the point from

[1] "Les sociétés animales," pp. 530, 545.
[2] Paris, Hachette, 1899.

which the synthesis of the sciences must take its bearings. In 1900 Berr founded the "Revue de synthèse historique," [1] the aim of which review was to emphasise the individual and the common elements in political history, the history of economics, religion, literature, art, and philosophy, as well as to collect the ideas and experiences of those thinkers who have successfully treated this or that branch of history, and so forth. In his later work, "La synthèse en histoire," Berr endeavours to estimate up to date the sum-total of the activity of his review.[2] His undertaking must be looked upon as an attempted compromise between a narrow specialist synthesis and the traditional philosophy of history, in which a priori elements are far too prominent. The most important relations which, according to Berr, resolve history into its simplest elements and throw light on the work of the true scientific historian, are those of Necessity, Chance, and Logic. Thoroughgoing social determinism he rejects, for synthesis cannot disregard individual contingencies. To this extent Berr would welcome Tarde's teaching as a complement to Durkheim.[3]

[1] Paris, Cerf et Cie. The review is still in existence. Amongst the contributors are historians, philosophers, and literary critics of all nationalities.

[2] Paris, Alcan, 1911.

[3] For some years past Berr has been publishing a vast encyclopædic work entitled "L'Évolution de l'humanité" (Paris, Librairie de la Renaissance).

Paul Lacombe, in his philosophy of history, stands, in spite of certain limitations, on positivist ground. Lacombe was a prominent collaborator in the " Revue de synthèse historique." His chief work is " L'histoire considérée comme science." According to him, History is not a science of the individual and the isolated. The historian's task is to explain how and why, from things that are common and similar, there has been produced a thing that is individual, isolated, new. History can only deserve the name of science if it leads to generalisations, possesses value as instruction, and permits an anticipation of the future. Nor, according to Lacombe, is there any essential difference between Natural Science and History. The world of nature is less mobile than the world of mankind: but it is not unchangeable.

Comte's Positivism has matured to some purpose in the works of *Charles Maurras*.[1] Maurras claims that he finds in Comtian Positivism the most stable foundation for his Nationalism and Traditionalism. He says he is a " traditionaliste par positivisme." Really, however, the determining factor in Maurras' activity is his hatred of the French Revolution. In

[1] Cp. especially his work, " Enquête sur la monarchie," which contains the programme of the Royalist-Nationalist journal " L'Action Française," of which Maurras is still the " Spiritus rector."

this respect Taine is his trusty guide and comrade. We certainly recognise in Maurras some typical characteristics of Comte's Positivism: fact-worship, and the conception of society as a given reality, governed by immutable laws, independent of individual reason.

II

CRITICO-EPISTEMOLOGICAL IDEALISM

EMPIRICAL Positivism in its varied nuances arose from the need of a reaction against views of life and schemes of life depending wholly on metaphysics and religion: the two other main currents referred to in the introduction chiefly owe their origin to the endeavour of philosophers of the second half of the nineteenth century to repress exaggerated beliefs in the omnipotence and self-sufficiency of exact science.

This is in the first place true of the various types and phases of *Critico-Epistemological Idealism*. The beginnings of this movement are almost contemporary with those of Empirical Positivism: both date from the commencement of the second half of the last century. The movement is not yet dead. Its representatives, although they take their stand on various sciences, seek to emphasise the part played by the intellect, relatively to that of the senses and nature, in the formation of exact science, and in doing this, to determine the limits of science.

They challenge every attempt to refer the higher to the lower. They demonstrate that a law of nature is no mere copy of crude empiric data, but a creation of the intellect, a symbolic relation, whose application to concrete reality assumes knowledge and the adoption of theories which are saturated with a priori elements.

Kant is unquestionably the chief pioneer of this movement. When he showed that there can be no knowledge of an external world independent of man, and that it is Mind which brings things into relationship with each other, he placed the spontaneity of man on an unshakable foundation. The Kantian apriorism is to some extent Activism: it implies that knowledge is an act of reciprocal penetration from within and without, of man and the world. Thus Kant dethrones Dogmatism and Scepticism at the same time. And, especially as the originator of the synthetic conception of Knowledge, Kant opened the road for that movement, so fruitful in results, which in France is known as "critique de la science," and has chosen as its task the smashing of the Empiric-Positivists' graven image.

As the second great pioneer of this second main School of thought we may mention *Renouvier* (1815–1903), who considered himself to be the most orthodox apostle of Kantian criticism. Certainly, Renouvier was influenced in no small degree

by Comtian Positivism, and his criticism undoubtedly has a decided relativist, anti-metaphysical, positivist tinge. He expressly declares that he adheres explicitly to one fundamental tenet of the Positivist School, *i.e.*, the reduction of knowledge to the laws of phenomena.[1] He employs the terms "fait" and "phénomène" extensively.[2] Most definitely does he stand for a "phenomenism" that, in spite of all limitations, has an anti-metaphysical bias. He also possesses in common with Positivism a firm belief in the necessity of knowledge of laws.[3] He becomes positively lyrical in his eulogy of Relativism, and regards as his real predecessors—next to Kant and Comte—Hobbes and Hume. The Absolute he explains as a mere figment of the brain. And yet it is possible to find in the Relativist Criticism of Renouvier many a base for attacking the empiric Positivism that originated with Hume and Comte. In this we refer especially to his anti-empiricism, to his apriorism, and to his endeavour to fix the boundaries of exact scientific knowledge. His watchword "Back to Kant!" urges the dethronement, not only of Metaphysical Eclecticism, but also of Naturalistic Positivism. In saying that for us things are real ideas, *i.e.*, ideas given by experience, Renouvier does not use the word "experience"

[1] "Essais de critique générale," I, p. xvi.
[2] *Ibid.*, p. 9. [3] *Ibid.*, pp. 113–14.

in the empirical sense, for a priori ideas as well as phenomena belong to the particular experience of the consciousness.[1] Renouvier does not hesitate to call himself an Idealist in the Kantian sense, inasmuch as he looks upon the purely material Subject of the materialist schools as a scientific figment.[2] His Relativism is seen in his contemplation of a phenomenon as relative to other phenomena. Experience gives the material for the relations. The Categories, Relation being the foremost category, are the first and irreducible laws of knowledge, the fundamental relations which determine the form of knowledge and regulate its movement.

The adherents of the Critical School in France may be divided into two chief groups: (*a*), the scientists and mathematicians who have made it their task, basing themselves on exact science, to attack this or that phase of Empirical Positivism and Scientific Imperialism and to determine the bounds of exact scientific knowledge: (*b*), the pure Epistemological School, who seek to give full expression to the mind's creative activity in the origination of knowledge, and at the same time to emphasise the independence of Philosophy and its right to exist alongside of the individual sciences.

[1] "Essais de critique générale," I, p. 12. [2] *Ibid.*, p. 39.

A

Claude Bernard (1813–1878)

As one of the earliest representatives of our first main group we may name *Claude Bernard*.[1] Like most of his contemporaries, Bernard stands under the influence of Positivism. Like the Positivists, he denies the possibility of any comprehension of the Absolute. The true goal of science, he holds, is the establishment of the laws which govern the conditions expressed by phenomena. Yet in one essential point Bernard breaks away from Positivism. He will not admit the empirico-imperialistic conception of exact science. The *Experimental Method* that he helped to found has nothing to do with Empiricism. Experiment is the application of methods, simple or complicated, with the definite purpose of varying or changing the processes of nature. "A crude fact is not scientific."[2] To proceed experimentally, it is necessary first to have an idea, and then to summon facts, *i.e.*, observations, which shall check this previously assumed idea.[3] Many years before Poincaré, Bernard dwelt on the important and indispensable part played in science by Hypothesis. The experimental method is based on the subsequent experimental proof of a scientific

[1] For our purpose, Bernard's most important work is: "Introduction à l'étude de la médécine experimentale," Paris, 1865.

[2] "Introduction," etc., p. 313. [3] *Ibid.*, pp. 36–7.

hypothesis.[1] Bernard even assigns the first place in the experimental method to *Feeling* or *Intuition*. Feeling, Reason, and Experience—these are the three limbs of the immovable tripod on which the experimental method rests.[2] In opposition to the Empiricists, Bernard regards Deduction and Syllogism as integral parts of the experimental method. So far from reducing the phenomena of life to mere chemico-physical processes, he assumes a creative idea which is peculiar to the development of life. Finally, in the interests of science he challenges the imperialistic claims of the exact sciences, and champions the right to exist of a philosophy which shall investigate such questions as are beyond the scope of scientific positivity.[3] Science and philosophy are not to tyrannise over each other: they are to supplement and help each other. Their separation would bode nothing but harm to the progress of knowledge.

A. A. Cournot (1801–1877)

Like Renouvier and Claude Bernard, Cournot was influenced by Positivism. In his case, too, the word "Relativism" is justifiable. He too contests the possibility of comprehending the Absolute. But his Relativism is not another name

[1] "Introduction," etc., p. 384.
[2] *Ibid.*, p. 77.
[3] *Ibid.*, pp. 390–1.

for Scepticism: nor is he an avowed Empiricist. In his theory of knowledge it is the idea of *Probability* that plays a central part. This gives all his views an original stamp.[1]

Dealing first with the relation of science and philosophy: if science is free, in its endeavour to reach a systematic scheme of things, separately to investigate Man and Nature, the subject and object of knowledge, philosophical speculation, having as its aim the comprehension of the relations of both elements, can never treat one independently of the other. Philosophy may be no science: it is at all events something as indispensable to human nature as Art and Science.[2] Science and Philosophy must supplement each other, urge each other forward. Without Science, Philosophy is null: without Philosophy, Science is blind. Cournot is conscious of the difference that separates him from Kant: yet in Kant he hails the philosopher who has penetrated more deeply than others into the question of the right of our judgments: he asserts that a new epoch began with Kant. He objects to the low value Kant assigns to everything that does not

[1] Of Cournot's works we may mention: "Traité de l'enchaînement des idées fondamentales, dans la science et dans l'histoire" (1861); "Essai sur les fondements de nos connaissances et sur les caractères de la critique philosophique," Paris, 1851; "Matérialisme, Vitalisme, Rationalisme," 1875.

[2] "Essai sur les fondements. . . ." II, p. 403.

admit of strict deductive proof. But he counts it to Kant's eternal credit[1] that in describing the process of knowledge with a rigid precision that had never known its like he gave full expression to the differentiation of Form and Content, Model and Material, of what is purely accidental and dependent on external influences, and of what is inseparable from the make-up of the mind that Knows.[2] Cournot's Critical philosophy is not Illusionism. It would be much more correct to speak of him as an idealistic realist, since he assumes that the work of knowledge is successful, and that, generally speaking, as we probe deeper into nature we discover in her, not confusion, but order.

With Cournot, the idea of *Chance* is of primary importance: it possesses a certain kind of reality. Everything has a cause: but there are independent series of causes, which can touch and intersect each other without having, taken all together, any relation of influence or dependence. And the task of Reason is, mostly, to differentiate between accidental phenomena and those which are connected together. Thus Cournot stands in opposition to Hume's scepticism, which interprets Chance as nothing more than our ignorance with regard to the true causes. In every science Probability plays a rôle more or

[1] "Essai sur les fondements. . . ." II, pp. 370–1.
[2] *Ibid.*, I, pp. 171–2.

less considerable. Hence philosophy is not less exact than other sciences. But, in the sphere of philosophy, no claim must be made to refer everything to logical demonstration, for that is the path to scepticism. The attainment of a high degree of probability should be sufficient, as in astronomy, physics, history, and so on.[1] Finally, Cournot will not hear of any endeavour to reduce the higher to the lower, and especially to trace back biological phenomena to physico-chemical processes. Cournot, before Bergson, under the influence of Kant, draws a very clear distinction between the world of the living and the non-organic world, between Mechanism and Organism,[2] and likewise between the world of Values (the Good, the Beautiful) and the baser needs of human nature (Pleasure, Pain, etc.).

Gabriel Tarde (1843–1904)

As mathematician, philosopher, economist, and historian, Cournot influenced his age in various ways, and the present generation through his own. Perhaps, even more than Renouvier and C. Bernard, he prepared the way for the contemporary " critique de la science." We have no space here for a close discussion: we would merely give a brief outline of the life-work of the distinguished *sociologist*,

[1] " Essai sur les fondements. . . ." I, pp. 171–2.
[2] *Ibid.*, II, p. 280.

Gabriel Tarde, who, without being a Kantian, attached himself loosely to the school of Cournot, to whom he dedicated his chief work, "Les lois de l'imitation," Paris, 1890. We may also mention his "Logique sociale," 1894; "L'opposition universelle," 1897; "Les lois sociales," 1898; "L'opinion et la foule," 1901.

Tarde stands for an essentially *psychological* as opposed to a purely biological conception of sociology. He stands at Cournot's side, seeing in him a Comte "épuré, condensé, affiné."[1] This implies that Tarde himself would readily join in the challenge to Positivism. Certainly he too aims at giving a scientific character to sociology. But to look for a purely biological or mechanical conception of sociology would, in his opinion, be explaining the known by the unknown. The true causes of social phenomena, he thinks, are the individual *actions*,[2] which he calls *inventions* or *discoveries*. By this he understands any innovation or improvement whatever in the social processes, *i.e.*, in the department of Religion, Language, Government, Law, Industry, Art.[3] Through *imitation*, whether free or compulsory, this initiative towards the *new* is spread with greater or less speed, after the manner of a light-wave or a family of termite ants. Tarde does

[1] "Les lois de l'imitation," Avant-propos, viii.
[2] *Ibid.*, pp. 1–2. [3] *Ibid.*, p. 2.

not shrink from giving the name of *Idealism* to this conception, with the postulate that History is not explained through the historian's ideas, but through those of the characters in the history.[1] Tarde also seeks to attain to scientific laws, *i.e.*, to gain knowledge, not merely of causes, but also of similarities, for in this way alone is it possible to compute and to measure, to proceed according to scientific method. In opposition, however, to Determinism, and following the lead of Cournot, perhaps of Boutroux, Tarde speaks of physical, biological, social *accidents*, which in combination give rise to confusion.[2] With this limitation, Tarde refers to "Laws of Imitation," according to which imitation and repetition generally occur in geometrical progression, retarded undoubtedly by obstacles of various kinds. From the law of imitation Tarde infers that Humanity is advancing towards an ever-growing unity and equality.[3] And this affords ground for hope that the ideal of everlasting peace will gradually be realised.[4]

Jules Tannery (1848–1910)

We will next discuss the present-day representatives, properly speaking, of the "Critique de la science." In the first place we should mention

[1] "Les lois de l'imitation," pp. 3–4.
[2] *Ibid.*, p. 8. [3] *Ibid.*, pp. 401–3. [4] *Ibid.*, p. 424.

Jules Tannery, the mathematician. Of his works the collection of essays entitled " Science et philosophie " (Paris, Alcan, 1912), deserves special attention. Quite in the manner of Epistemological Idealism, Tannery holds that our knowledge of the external world is conditioned by our intellectual machinery, and that what is called the regularity of natural laws has a conventional character. What we know immediately is nothing more than our states of consciousness.[1] With Poincaré and his Pragmatism, Tannery assesses the value of scientific knowledge from the standpoint of utility, *i.e.*, according to the degree in which it permits us to discern certain agreements in the everlasting tangle of things, which can be expressed by simple formulæ, easily grasped by our intellect. Tannery challenges as well mathematical imperialism and determinism. In every stage of the evolution of science he discovers a break in continuity. Most forcibly does he challenge the reduction of the mental and psychical to the physiological, *i.e.*, the degradation of Thought to something purely " epiphenomenal," which is the effect, *e.g.*, of Le Dantec's teaching.[2] The activity of thinking is, according to Tannery, different from known mechanical or physico-chemical processes. He even goes so far as to assert that there is no

[1] " Science et philosophie," p. 19. [2] *Ibid.*, p. 41.

necessary contradiction between thinking and the absence of a brain.[1] Tannery holds that Determinism is a limiting conception. It assumes the existence of Thought: it is for Thought that things are determined.

Henri Poincaré (1854–1912)

In the attempt to define the limits of exact science, and, generally speaking, for the Renaissance of Epistemological Idealism in France, the "critique de la science" of *Henri Poincaré*, mathematician and astronomer, is of the highest importance. Poincaré is more deeply influenced by Kant than the representatives of this movement whom we have already reviewed. The two fundamental principles which he seeks to establish in respect of mathematics and natural science, namely, the creative freedom of the mind, and the essentially conventional character of these sciences, are to a large extent Kantian in origin, in spite of all Poincaré's criticism of Kant, in spite, too, of the influence which thinkers like Cournot and Boutroux have exercised on him. Most important of Poincaré's works for our purpose are: "La Science et l'Hypothèse," 1902; "La valeur de la science," 1905; "Science et Méthode," 1909; "Dernières

[1] "Science et philosophie," p. 63.

Pensées," 1919. All are published in the series "Bibliothèque de philosophie scientifique," Flammarion, Paris.

Poincaré's Kantianism is expressed with special emphasis in his Relativism and Pragmatism. Whenever Poincaré talks of Relativity and Utility he implies that in scientific work it is not mere experience that is decisive, but intellectual activity; that science is relative to man; that science is no artificial product, but the natural result of an agreement. The axioms in geometry are in this measure conventions, in so far as our choice of axioms is indeed guided by the facts of experience, but is free all the same, and only limited by the necessity of avoiding all contradictions. The question, "Is the Euclidean geometry true?" has no significance for Poincaré. It is equivalent to asking, "Is the metric system true and are the old weights and measures false?" One geometry cannot be more true than another; it can only be more suitable to its purpose. And the Euclidean geometry is unquestionably more suitable.[1] To this extent does Poincaré's conception of science coincide with Claude Bernard's; both consider experience as nothing more than an opportunity for demonstrating an idea already existing in our mind. Poincaré would limit the sphere of experience still more. He lays even greater stress

[1] "Science et Hypothèse," p. 90 *sq.*

than C. Bernard on the necessity of *generalisation* and *hypothesis* in science. In deliberate contrast to Newton's famous phrase, "Hypotheses non fingo," Poincaré lays down the principle that there is no such thing as a science without suppositions; the value of science and truth depends on a convention, and in the choice of a hypothesis considerations of expediency play a great part. Thus the question of the existence of the ether is of little account; the really important point for us is, that everything happens *as if* the ether did exist, and that this hypothesis is convenient for the explanation of natural phenomena.[1]

Like Cournot, Poincaré attributes great importance to *Probability* in science. Hence he undertakes to classify the problems of probability according to the varying measure of our ignorance.[2] Thus in respect of physical reality it is incorrect to assert "The same causes need the same time to produce the same effects." It is right to say: "Approximately identical causes need approximately the same time to produce approximately the same results."[3] Like Cournot, Poincaré does not consider *Chance* as the measure of our ignorance, but as being something positive, which will always exist. Phenomena obey the *laws of chance*, when-

[1] "Science et Hypothèse," pp. 245–6.
[2] *Ibid.*, pp. 238, 243. [3] "La valeur de la science," p. 42.

ever small variations in the causes are able to produce great variations in the results. This is true of natural science; it is most of all applicable to the sciences of the mind.[1]

Poincaré's Pragmatism is not to be taken in a Utilitarian and Nominalistic sense. He will have nothing to do with a science whose only aim is its practical application. Thus the mathematician must not be a mere purveyor of formulæ to the physicist. Physics and mathematics are to supplement and permeate each other. It is especially possible in the case of Astronomy, according to him, to speak of a disinterested utilitarianism. Astronomy is useful, says he, because of its greatness and beauty, because it raises us above ourselves. Astronomy shows us the littleness of man's body and the greatness of his mind.[2] On the other hand, it is to Astronomy that we owe our mastery over nature, for Astronomy taught us the existence of laws.[3] He emphatically repudiates the utilitarianism of the Positivists: "A. Comte says somewhere that it is vain to endeavour to ascertain the structure of the sun, since this knowledge could be of no possible use to sociology. How could he be so shortsighted?"[4] Thus Poincaré's criterion

[1] "Science et Méthode," p. 95.
[2] "La valeur de la science," p. 157.
[3] *Ibid.*, p. 160. [4] *Ibid.*, p. 166.

for estimating the value of science is not its general utility, but its inward uplift.

Poincaré is very decidedly opposed to Le Roy's purely instrumental conception of scientific knowledge and to his Nominalism, which holds that science can give no knowledge of the truth, and can only serve as a rule for action. Against this theory he argues that knowledge is the aim and action the means. Le Roy's assertion, that the scientific investigator creates the scientific fact, is, according to Poincaré, an utter paradox. He sees no line of demarcation between the crude fact and the scientific fact, and therefore none between science and reality. The scientific fact is just the crude fact translated into convenient language.[1] Unlike Le Roy, Poincaré would ascribe to exact science an objective character: he conceives it as the totalisation, classification, unification, harmonisation of reality. For a just appreciation of Poincaré's Relativism it is essential to note the leading part that he assigns to the idea of Harmony. Speaking generally, his conception of Relativity means the same as that of Solidarity. For example, when he says that objectivity is to be sought in the relations of things, this implies that it would be absurd to look for objectivity in things that stand in isolation. This has nothing in common with positivisitic Relativism.

[1] "La valeur de la science," p. 231.

Poincaré's thought is this, that science can only possess value if it reveals to us the inward connection of things, the World-Harmony.[1] Beneath the fact or phenomenon (fait) the scientific investigator is conscious of its underlying *soul*.[2]

A further distinctive mark of Poincaré's conception of science is the rôle he assigns in the process of knowledge to *Intuition* and the *Unconscious*. It is hardly necessary to say here that Poincaré does not comprehend Intuition in the Bergsonian manner. What he understands by the term is a super-logical evidence, a faculty that enables us to discern the goal from afar. In every discovery of science there is unconscious activity, and especially in mathematical discovery, although it must be preceded by conscious activity and exertion of the will. To give greater precision to his doctrine of the importance of Intuition in mathematics, he criticises the mathematical philosophy of *Couturat*, *Peano*, *Bertrand Russell*, *Hilbert*, and others, and defends the position of Kant.

We must devote a brief mention to one final aspect of Poincaré's attack on scientific imperialism: his conception of the relation of *Ethics to Science*.[3] The basic principle of Poincaré is this: there can

[1] " La valeur de la science," p. 271.

[2] " Science et Méthode," pp. 22–3.

[3] Cp. " La morale et la science " in " Dernières Pensées," Paris, Flammarion, 1919.

be no scientific Ethics: there can be no unethical Science.[1] The principles of Science are formulated in the indicative mood, and no ethical imperative can be deduced from them. The motive force of morality can only be a Feeling.[2] Science can only exercise immediate influence on morality in proportion as it is able to evoke new feelings. Thus a man who is in a position to feel the splendid harmony of the laws of nature will be the more easily disposed to conquer his paltry selfish interests. The same is also true of co-operation and the striving for the truth, without which no science can exist.[3]

An interesting contribution to the criticism of science was made by the mathematician *Émile Borel* in his work "Le Hasard" (Paris, Alcan, 1914). Borel considers the purely mechanical explanation of natural phenomena as inadequate; it must be completed by statistical explanation. Statistical explanation of a phenomenon consists in considering it as the resultant of a large number of unknown phenomena depending on the laws of chance.[4] Thus Chance is altogether something positive, and no mere consequence of our ignorance. This precludes us from speaking of an absolute Determinism in the laws of nature, for in spite of the

[1] Cp. "La morale et la science" in "Dernières Pensées," p. 225.
[2] *Ibid.*, p. 227. [3] *Ibid.*, p. 230. [4] "Le Hasard," p. iii.

progress of science there are many processes which man cannot foresee.[1] Statistical probability permits us to understand that the necessity of a collective phenomenon is not incompatible with the "freedom" of the constituent phenomena, while, on the other hand, the absolute determinism claimed for the constituent phenomena does not allow a rigidly accurate anticipation of the collective phenomenon.

Pierre Duhem (1861–1916)

Amongst the most important manifestations of contemporary "critique de la science" in France the work of *Pierre Duhem*, the physicist, has an unquestioned place. Duhem has had a great influence on the other representatives of this philosophical movement. For our purpose his most important works are "La Théorie physique, Son objet et sa structure," Paris, 1906, and "Le système du monde" (unfinished); "Les sources des théories physiques"; "L'évolution de la mécanique." Duhem is a devout Catholic, and even as a physicist he avows himself a follower of Thomas Aquinas. And yet his philosophy may be regarded as a phase of the criticism of knowledge which takes its direction from Kant. He, too, is convinced that crude experience is inadequate, and that there must be a

[1] "Le Hasard," p. 6.

spontaneous activity of the mind in the origination of knowledge. Pascal's favourite phrase about mankind, " S'il se vante, je l'abaisse ; s'il s'abaisse, je le vante," is the *leitmotiv* of Duhem's criticism of exact science. While seeking to delimit the frontier of physical knowledge, he aims at emphasising its permanent value. What urges him to delimit the frontier is, above all, his desire to bring to adequate expression the mind's active participation in the production of knowledge. His philosophy must not be understood in the sense of scepticism or illusionism.

Duhem holds that Physics is not a science which interprets. Its real usefulness depends on its determination to be nothing more than a simplified and co-ordinated method of observation, which arranges the laws of experience according to a classification which shall be as perfect and as natural as possible. Physical science is always in a state of becoming. As soon as a physical theory ceases to be in unison with experience, it ceases to be serviceable and must consequently give place to a new theory. Mathematical exactitude is impossible in Physics. The physicist works with hypotheses, and a physical hypothesis is not an incontrovertible truth.[1] Proceeding further than Mach, Duhem is of opinion that theory is not merely an economic

[1] " La Théorie physique," etc., p. 26.

presentation of laws, but a classification at the same time of these laws.[1] But where Order is, Beauty follows in its train. This does not, however, turn science into a mere artificial system. Certainly, physical knowledge does not give any explanation of the laws of nature, nor does it unveil the truths that lie behind sense-phenomena; but with the perfecting of our knowledge there grows in us the surmise that the logical order, in which physical science marshals the laws of nature, is the reflex of an ontological order; and with this the conjecture that it strives to be a natural classification.[2] We are justified, too, in using the term "pragmatism" of Duhem, inasmuch as he considers as the distinctive mark of a natural classification, over and above everything, the usefulness of the theory.[3]

Another characteristic of Duhem's criticism of science is his attack on the reduction, even in the "exact" sciences, of Quality to Quantity. A quality of a given kind and intensity is not under any circumstances the product of several qualities of the same kind and less intensity. Every stage in the intensity of a quality has its peculiar individual characteristics, which make it absolutely distinct from lower or higher intensities.[4] Again, Duhem sets a limit to exact science, by regarding the

[1] "La Théorie physique," etc., p. 32. [2] *Ibid.*, p. 38.
[3] *Ibid.*, p. 43. [4] *Ibid.*, p. 179 *sq.*

theoretical process (fait) not as the image of the practical process, but as a work of the mind. Duhem's contention, that experience is the product of an intellectual activity, itself occasioned by an external datum, marks an advance on Poincaré.[1] Physical experience is not merely the isolation of a given number of phenomena; it is also the translation of these phenomena into a *symbolic language* through rules taken from physical theories.[2] The same is approximately true of physical law. This too is no servile image of the datum; it is a creation of the intellect, a symbol. Duhem adduces as an example Mariotte's law.[3] The physical law is provisional; it presents the phenomena to which it applies with a degree of approximation which is sufficient for the physicist, for the time being, but will not always be sufficient.[4] When symbols no longer avail to present the truth in an adequate manner, they must be scrapped and replaced by new symbols. Progress in natural science, apart from this incessant struggle, is inconceivable.

Émile Meyerson (1859–)

The Theory of Knowledge put forward by Émile Meyerson, the chemist, serves in many respects to complete the efforts of those French philosophers

[1] "La Théorie physique," etc., p. 247. [2] *Ibid.*, p. 265.
[3] *Ibid.*, p. 27. [4] *Ibid.*, p. 281.

who stand for the general criticism of science; and yet he is not a Frenchman himself. Meyerson, too, chiefly concentrated on the struggle against the empirico-positivist theory of knowledge. He too demonstrates that the so-called empirical science that depends on laws is saturated with a priori elements, and that all scientific work, either consciously or unconsciously, is ruled by hypotheses. In the struggle against the Comtian Positivism, Meyerson is much more thoroughgoing than his predecessors. This, however, is but one side of Meyerson's theory of knowledge. The second and not less important is his rejection of sceptical phenomenalism, of relativism, of that agnosticism that depends on the exact sciences, of pragmatism, and what accompanies all this destructive argument, his clamorous demand for a metaphysical-realist conception of knowledge in general and exact scientific knowledge in particular. This is just what gives his criticism an individual stamp. Amongst Meyerson's books our attention will be mainly directed to his chief work "Identité et Réalité" (Paris, Alcan, 1908). His later productions, "De l'explication dans les sciences," 2 vols. (Paris, Payot, 1921), and "La déduction relativiste" (Paris, Payot, 1924), will be considered only as a supplement and reaffirmation of the opinions set forth in the main work.

In his struggle against the empirical Positivism of the Baconians and Comtians, Meyerson relies on chemists like Bertholet, Davy, and Liebig to demonstrate that Empiricism in the Baconian sense is an untenable proposition, that investigation is always guided by preconceived ideas, by hypotheses, and that it is impossible to do without such guidance.[1] At every step in the empirico-positivist law-governed science, considerations of identity and continuity, and the like, are bound to have a modifying influence. Consciously or unconsciously the scientific investigator has to obey two a priori principles, Conformity to Law and Causation.[2] We can arrive at no law without, in a measure, doing violence to nature, in the more or less artificial isolation of a phenomenon from the collectivity, and in the elimination of influences which might vitiate the observation. These principles are not the result of crude experience; they belong to our very being. The principle of identity is the true essence of Logic, the real mould in which human thought is cast. Meyerson takes up a position half-way between Dogmatism and Positivism: he repudiates alike the doctrine of universal comprehensibility and the sceptical denial of all comprehensibility. Meyerson grants that a harmony exists between our

[1] "Identité et Réalité," p. iii.
[2] *Ibid.*, pp. 34, 36.

understanding and reality, but with this proviso, that the harmony is partial. Science is not strictly empirical; it is more; it is the progressive application of the Principle of Identity to nature in the shape of the causal urge. The law of nature is an ideal construction; it cannot be fully adequate to reality.[1]

Scientific theories are conditioned by our thought, by hypotheses: this, however, gives no ground to assert that science is purely artificial and must abandon all claims to explain phenomena. Hence Meyerson is anxious to break down the barrier that Duhem, for example, would seek to erect between science and metaphysics, and especially between explanation (explication) and presentation (représentation) in science. Meyerson's fundamental principle is his conviction that the procedure, in man's conscious thought, and in thought in its unconscious state within the rest of reality, are one and the same. All Knowing is fundamentally metaphysical. In open opposition to Comte, Mach, etc., Meyerson endeavours to prove that natural science cannot confine itself to the mere formulation of laws, that the principle of conformity to law (légalité) is not adequate, that science also aims at the explanation of phenomena, that such explanation consists in the identification of cause and effect (antécédent et

[1] "Identité et Réalité," pp. 369, 380.

consequent), and that this principle of scientific causation is profoundly different from the principle of conformity to law.[1] Hence Meyerson's attack on Le Roy,[2] who with others sees an impassable gulf between ordinary understanding and science, between crude fact and scientific fact. Meyerson goes so far as generally to reject the pragmatic conception of science, which regards action as the unique aim of science. No, science aims at *understanding* nature. The effort of science is towards a progressive rationalisation of the real.[3] Causal hypotheses are not mere tools used in investigation, nor mere frameworks: they possess an intrinsic value of their own; they correspond to Nature's inmost being.[4] Certainly, the harmony between the Rational and the Real is incomplete. There is, however, a profound analogy between the causal image and the phenomenon. Keeping within these bounds, Meyerson teaches, in agreement with Ostwald, that the identity of Thought and Being, which Spinoza, Schelling, and Hegel claimed as axiomatic, still remains the programme of science. It is also possible to hold that natural science is really striving to reduce all natural phenomena to a universal Atomism, since, to a certain extent, this idea satisfies our natural identity-instinct and really does

[1] "Identité et Réalité," p. 33. [2] *Ibid.*, p. 349 *sq.*
[3] *Ibid.*, p. 353. [4] *Ibid.*, p. 360.

offer points of agreement, sometimes surprisingly close, with the phenomena.[1]

Thus, in Meyerson's opinion, natural science is utterly and thoroughly ontological. Science cannot do without the conception of the thing; and if the things of the common understanding are not good enough for science, it creates new ones in its own image. Science in no way corresponds to the Positivist scheme of things.[2] This also holds good of the purely utilitarian idea of science. Everywhere in science the dominant factor is the effort to interpret.[3] Underlying this fundamental principle of Meyerson is the metaphysical axiom of the " rationality of the real " which has much in common with Hegel's position, in spite of Meyerson's criticism of that philosopher. What differentiates Hegel's position from that of present-day science is this, that Hegel would only admit of one Ultra-Rational in his science—" Being Something Else "—explaining it in other respects as " rational," whereas the science of to-day presupposes several Ultra-Rationals.[4] Hegel and Comte do violence to natural science when they claim to confine it within a region of precise experimental regulations. Though their reasons are different, both Hegel and Comte

[1] " Identité et Réalité," pp. 377–8.
[2] " De l'explication dans les sciences," I, p. 31.
[3] *Ibid.*, pp. 39, 49. [4] *Ibid.*, II, p. 68.

fail to see that natural science is striving towards Rationality.[1] For all this, Meyerson allows Hegel the unquestioned merit of having undertaken the immediate rationalisation of the Real.[2]

In his third book, "La déduction relativiste," Meyerson is above all occupied in setting forth his fundamental convictions by means of the interpretation and discussion of Einstein's Theory of Relativity. This, if any, theory shows that natural science is not content with merely establishing the principle of conformity to law: it seeks to grasp and even to interpret the essence of the Real: and without Deduction its task is impossible. The victory of the Theory of Relativity involves the overthrow of positivist Phenomenalism. At the back of the theory of Relativism there is, latent indeed, a true hypothesis as to the essence of the Real.[3] In this Meyerson is opposed to Petzoldt's phenomenological, purely relativist conception of the Theory of Relativity: for in the latter theory the Real is quite definitely an ontological Absolute, a true existence apart.[4] In short, Meyerson discerns in the Theory of Relativity a brilliant refutation of Comtian Positivism, which holds that the generalisation of experience, without any intrusion of

[1] "De l'explication dans les sciences," p. 138.
[2] *Ibid.*, p. 119.
[3] "La déduction relativiste," p. 61.
[4] *Ibid.*, p. 79.

deductive elements, is the only thing that can be of real value in science. Einstein foresaw the processes of experience.[1] The victory of the Theory of Relativity confirms at the same time the progress of the Platonic Idea, in spite of the incessant bifurcations of Reality.[2]

GASTON MILHAUD (1858–1918)

Gaston Milhaud, a writer on mathematics and philosophy, criticised the empirical conception of natural science and the Positivism of Comte in an essentially *positive* sense: he sought to overthrow empirical Positivism by insisting on the fundamental reality of the Mind in the origination of knowledge. In Milhaud, too, this refutation is conceived in the true Kantian spirit. Our attention will be chiefly directed to the following among his writings: "Essai sur les conditions et les limites de la certitude logique," 2nd ed., 1898; "Le Rationnel," 1898, and "Le Positivisme et le progrès de l'esprit," 1902 (Paris, Alcan).

In a certain measure we find in Milhaud a conventional and *symbolic* character of the knowledge of nature: for he holds that mathematics as applied to physics does not emerge from the region of fiction, and as regards the Real, does no more than play the

[1] "La déduction relativiste," p. 293. [2] *Ibid.*, p. 297.

part of a cleverly constructed language. The same is also true of *natural laws*. In the formulæ of these laws there are contained ideas the concrete reality of which eludes all observation.[1] At all events there is no necessary connection between the phenomena and our fictions. This "fictionalism" of Milhaud must not be confused with Vaihinger's Illusionism, because Milhaud is bent on demonstrating that the laws of nature are not fetters for our intellect, but its own creation. Following Boutroux, Milhaud impugns the necessity of natural laws, and above all he attacks the doctrine of psychological Determinism. He considers it utterly beyond the competence of physics to establish even the slightest equivalence between a single physical phenomenon and a phenomenon of the consciousness.[2] Milhaud joins with Kant in demanding that in the endeavour to reach a rational theory of knowledge much more consideration should be given to the independence of the intellect than is usually the case. But, unlike Kant, and under the influence of Boutroux, he discovers in this creative activity a certain degree of contingency and the indeterminateness.[3] Hence Milhaud criticises the rationalism of Hegel, whose "Absolute" is repugnant to him.

But the most individual element in Milhaud's

[1] "Essai," etc., p. 91 *sq.* [2] *Ibid.*, p. 127.
[3] "Le Rationnel," p. 3.

contribution to philosophy is his attack on Bacon's empirical imperialism and Comte's Positivism. In this respect he goes further than Poincaré. The " Idols " and " Chimæras " that Bacon and Comte wished to cast out are an integral factor in the science of to-day. As examples of this type of " idol " Milhaud names the force of attraction, the atom, negative quantity, infinity, and so forth.[1] Milhaud lays great stress on the part of Free-will in most physical theories. He arrives at the conclusion that in general a deeper penetration into the various departments of the theoretical sciences, themselves growing more and more perfect, will bring with it a proportionately greater accumulation of definitions and ideas, and consequently will bring into clearer light the creative work of the mind.[2]

Milhaud arrives at the sum-total, so to speak, of the whole criticism of precise scientific knowledge, and at the same time of Positivism, when he demonstrates that this movement corresponds to a new stage, following after the three stages of Comte. He calls this stage "*the stage of Inwardness*," and consequently refers to the " law of the four stages." [3] " The fourth stage is essentially distinguished by the free spontaneity of the soul's inner life." [4] A

[1] " Le Rationnel," p. 14. [2] *Ibid.*, p. 60 *sq.*
[3] " Le Positivisme et le progrès de l'esprit," p. 137.
[4] *Ibid.*, p. 183.

glance at the ethical, social, and religious movements of the present day will convince us that we really are in face of a stage in Comte's sense, a general type of all the intellectual tendencies of the time: everywhere we are met by the turn towards inwardness.

B

Arthur Hannequin (1856–1905)

At the threshold of the second main group of the critico-theoretical idealists [1] we ought to refer to the work of *Arthur Hannequin*, since his contribution to the criticism of natural science is a considerable one: and besides this he marks a step forward, in an approach to spiritual-idealistic metaphysics.[2] In his endeavour to bring into prominence the super-empirical character of natural science, he shows greater boldness than his predecessors. He considers the atomic hypothesis as the soul of our natural science. Now the atomic hypothesis assumes everything that has to be proved. A

[1] Cp. above, p. 87. To complete our sketch of the first main group, the criticism of science as taught by *Le Roy* and *Wilbois* would naturally be dealt with here. But in view of the great influence exercised on these writers by Boutroux and more especially by Bergson, we consider it more convenient to refer to them in Part III of this book.

[2] Hannequin's chief work is his "Essai critique sur l'hypothèse des atomes dans la science contemporaine," a doctoral thesis, 1895, Paris, Alcan.

hydrogen atom is hydrogen itself with all its properties, on a smaller scale.[1] The atom unites the problems in itself but does not solve them. And yet this hypothesis is a necessary consequence of the way our knowledge is constituted. The mind comprehends in Things that which comes from the mind itself—extension and quantity, more correctly, number. "Our mind can know of things only what it discovers in them of its own substance, what it projects into them; it can only know perfectly what it creates."[2] If the atom sought to be more than an hypothesis and to attain reality, it would be full of contradictions. If the contradictions involved in the atom are to be overcome we must turn to metaphysics.[3] The duty of metaphysics is to investigate why natural science is unable to comprehend reality, why quantity is only partially effective as opposed to continuity. Thus Hannequin is not merely content to follow the Kantian-critical school in asserting that knowledge, as we have it in the natural sciences, sets up everywhere, in the place of phenomena and the properties of phenomena, the constant relations of all that is measurable in these phenomena (*e.g.* in Physics, the Laws of Heat, Sound, Light, and Electricity, and those of Gravitation). He goes further, and assumes that natural science can only lead up to the

[1] "Essai," pp. 16–17. [2] *Ibid.*, p. 4. [3] *Ibid.*, p. 19.

threshold of the Real, that it can never grasp the essence of what lies beyond the accidental, nor penetrate to the actual becoming[1] of things. So science must be continued and completed by metaphysics. The a priori conception of science is a common possession of Hannequin and the Kantian school. In his metaphysical teaching Hannequin strives to rise above the agnosticism and formalism of the critical school, by following, for the greater part, the lead of Leibnitz.[2] Between the modes of presentation, which proceed from ourselves, and the given reality, he assumes the existence of a pre-established harmony, with this difference, that whereas Leibnitz conceives of that harmony as given once for all, Hannequin holds that it is continually being created by the living energy of the things that share in it.[3]

Octave Hamelin (1856–1907)

While Hannequin has points of contact with Kant, but reacts in the direction of Renouvier, most writers in the second main group of the critical school are more or less under the predominant influence of the founder of "Neocriticism" in France. This is especially true of Renouvier's

[1] "Essai," p. 310. [2] *Ibid.*, p. 417 *sq.* [3] *Ibid.*, p. 376.

chief disciple and successor, *Octave Hamelin*.[1] Leaving Renouvier and Kant out of the question, Hamelin was strongly influenced by Hegel, and consequently arrives at a critical metaphysics, which denotes an advance on the purely negative Neocriticism. Yet he has immediate affinities with Kant and Renouvier. He aims at the overthrow of empiricism by the construction of a new idealistic system which he describes as "rationalisme intégral" and even as a "Noodicée."[2] Hamelin follows Renouvier in considering *relation* as the simplest law of things; and its three stages are Thesis, Antithesis, Synthesis. In opposition to the empirical school he asserts that all knowledge is systematic. Knowledge is the determination of necessary conditions between things.[3] The limitation of the sphere of knowledge is not conceived by Hamelin in the agnostic sense. His opinion is rather—and in this respect he consciously departs from Spencer and the Spencerians, as well as from Kant—that "if there are limits to knowledge, they exist in this sense, that a moment comes when the knowledge is complete; that is to say, when it forms a system."[4] Empiricism is nothing more or less than the denial of knowledge, just because knowledge

[1] Hamelin's chief work is his doctoral thesis, "Essai sur les eléments principaux de la représentation," Paris, Alcan, 1907.
[2] "Essai," p. 416. [3] *Ibid.*, p. 7. [4] *Ibid.*, p. 9.

is a system. The analytic method will not do; it must be complemented by the synthetic method. Hence Hamelin finds it impossible to exaggerate the value of the Kantian distinction between analytic and synthetic judgments for the history of method.[1] But he extols Hegel as the true master of the synthetic method. Yet he deliberately breaks away from the Hegelian conception in replacing Hegel's Contradiction by Correlation.[2] At all events Hamelin follows Hegel in emphasising the synthetic character of one and all of the Categories. He regards consciousness as the highest element in reality. In Thought he sees a creative activity, which is the origin of the Subject, the Object, and the synthesis of the two.[3] If by the word Absolute we mean " that which includes all relations in itself," then are we justified in saying that Mind is the Absolute.[4] Mind is Being, Mind, that is to say, as far as it is really Consciousness. Mind is all, and all-comprehensive. God is Mind. As for the search for absolute Truth, Hamelin rejects, not merely any explanation from a low-level, such as Materialism, but idealistic Pantheism as well. The most satisfying philosophy to him is Theism.[5] And this is the point which completes the synthetic construction of the " Idea " according to Hamelin.

[1] " Essai," p. 27. [2] *Ibid.*, p. 35. [3] *Ibid.*, p. 343.
[4] *Ibid.*, p. 450. [5] *Ibid.*, p. 457.

Amongst the other disciples of Renouvier we may single out for mention *F. Pillon* and *Lionel Dauriac*, who are perhaps the most loyal of his followers. Their special merit lay in the publication of the "Année Philosophique" (Paris, Alcan), which appeared regularly down to the beginning of the war. *Dauriac* acknowledges the influence of Kant, Lachelier, Ravaisson, and Boutroux, and—later—Hamelin, as well as that of Renouvier. Speaking generally, however, he belongs to the critical school of Renouvier, as is shown by his opposition to empirical Positivism on the one hand and spiritual Eclecticism on the other.[1] In his later writings Dauriac argues with special force that Positivism is the negation and indeed the death of philosophy, for it leads to scepticism. Dauriac agrees with Renouvier in acknowledging the necessity of Free-will; he professes his adherence to Phenomenalism and Idealism, and adopts Renouvier's doctrine of the Categories.

F. Evellin (1835–1910) may be described as a Renouverian with a metaphysical tinge.[2] He is especially worthy of notice as carrying on Renouvier's struggle against the idea of Infinity. He tries to prove that this idea is the property of purely sensuous empirical knowledge alone. On the other

[1] Cp. especially "Croyance et Réalité."
[2] Evellin's chief work is "Infini et Quantité," Paris, 1880.

hand, true, *i.e.*, metaphysical rational knowledge discerns the true essence of Nature in the finite. "The Infinite," he says, "is closely connected, not with the Absolute of being, but with the becoming of phenomena. But the finite, together with permanence in the Real, includes in itself completion and perfection." [1] The same idea underlies Evellin's solution of the problem of the antinomies: the Theses (Finiteness, Elementalness, Activity, etc.) express true reality and rational knowledge; the Antitheses are applicable to purely sensuous knowledge.

Louis Couturat (1868–1914)

L. Couturat's position in the critical group is somewhat singular. He throws all his energy into the attack on empiricism. But he goes further: he assails with no less force the non-metaphysical criticism of Kant and the Kantians; and in absolute opposition to the Finitism of Renouvier and Evellin he professes a rationalistic "infinitistic" metaphysic. His most typical work is his doctoral thesis, "De l'Infini mathématique" (Paris, Alcan, 1896). Couturat is also, together with Peano and Bertrand Russell, most prominent in the "Logistic" movement: he helped to found the international

[1] "Revue de Métaphysique et de Morale," 1902, p. 295.

language "Ido," and was the keenest of all its propagandists.

Couturat is at one with the critical school in believing that, above all, philosophy essentially consists in a general criticism of the sciences, with this immediate proviso, that philosophy is not mere criticism, but first and foremost a metaphysic, a philosophy of nature and a philosophy of mind, a rational knowledge. Unlike the teaching of Renouvier, Couturat's criticism is essentially a mathematical or integral rationalism. Couturat will have nothing to do with Kant's "sensuous perception." Quantity and Number, in his view, are creations of the mind; it does not, however, follow that Nature and Mind are strange to each other or opposite. Independent of the understanding and above it we possess a faculty which reveals the conformity of our ideas with reality, or, more accurately speaking, with the idea of reality: and this is *Reason*.[1] The Understanding is, as it were, the intermediary between our reason and the mere empiric datum. Consequently the idea of *Infinity* cannot possibly be given by experience, for all objects of experience are finite: nor is it a mere product of the imagination: it cannot be other than a priori.[2] Thus Couturat, in contrast to Renouvier and Evellin, asserts that

[1] "De l'Infini mathématique," p. 537. [2] *Ibid.*, p. 540.

the necessity of the Finite does not force itself on the reason, but rather on the senses and the imagination.[1] The same is approximately true of Couturat's solution of the antinomy problem: the theses he assigns to the imagination, or more correctly to the understanding: the antitheses he ascribes to reason.[2] So to sum up: metaphysic is possible in spite of criticism, and in spite of Neocriticism an "infinitistic" metaphysic is probable.[3]

Victor Brochard (1848–1907) in his doctoral thesis "De l'erreur," Paris, 1879, starts from Renouvier's Neocriticism.[4] He takes his stand on the platform of critical idealism and contingency, as framed by Kant and Renouvier, according to which there are only phenomena and laws, or ideas and categories, through which we connect ideas with each other. He proves that Error is accidental, and consequently no bar to Certitude.[5] Error, like Truth, is an act of free will. He rejects the dogmatic idealist conception of error, which explains error as a consequence of the misuse of our faculties.[6] Wrong judgment is as much a positive act as right

[1] "De l'Infini mathématique," p. 560.
[2] *Ibid.*, p. 577. [3] *Ibid.*, p. 580.
[4] Another important book of Brochard's is "Les Sceptiques grecs." In "La morale ancienne et la morale moderne" he criticises the Kantian idea of Duty, and approaches the classical Eudæmonism.
[5] "De l'erreur," p. 7 *sq.* [6] *Ibid.*, p. 125.

judgment. Error cannot be referred to a mere lack of something. Error does not arise *although* I am a rational being, but just *because* I am a rational being.[1] Truth is a confirmed hypothesis, Error an unconfirmed hypothesis.[2]

The influence of Renouvier is also to a certain degree visible in the critical doctrine of *Louis Liard* (1846–1917). Thus in his thesis "Définitions géométriques et définitions empiriques," Paris, 1873, he draws attention to the constructive nature of the fundamental ideas in the mathematical sciences, and to the mind's active participation in establishing them. But Liard goes further than the Critical School. He emphasises the insufficiency of positive science, and, on the other hand, the necessity and the just claims of metaphysics, when we are dealing with the solution of ultimate problems. In his work "La science positive et la métaphysique" he attempts to show that, while knowledge of reality is certainly possible, it can never be attained by exact science, but by metaphysics alone. Liard grants that metaphysics is not a science properly so called: it does not, however, follow that positive science exhausts all that can be known. The truth is that positive science apart from metaphysics is unthinkable. It is to metaphysics that the majority of our general ideas

[1] "De l'erreur," p. 132. [2] *Ibid.*, p. 134.

owe their discovery; ideas, which, tested by experience, form to-day the common possession of positive science. Positive science is more than mere observation and confirmation of facts; it contains principles, which enable us to rise above the facts and to learn their constant relations. The general notions of positive science originate throughout in the Absolute, which Liard understands as being, so to speak, the pole of our knowledge, as being essentially equivalent to Perfection. To this extent Liard stands for an ethical conception of metaphysics.

J. J. Gourd of Geneva (1850–1909) in his work, "Le Phénomène, Esquisse d'une philosophie générale" (Paris, Alcan, 1888), represents a Phenomenalism which in essentials takes its direction from Renouvier. General Philosophy, which science as opposed to metaphysics represents, must look for its object in the phenomenon, *i.e.*, in the world of consciousness. Questions relating to the destiny of the individual or to the foundations of morality are not in its immediate sphere. In the phenomenon two elements meet, which are inseparably bound up together: Being, to which are related Continuity, Simplicity, Quality; and Not-Being, to which correspond Discontinuity, Heterogeneity, Quantity. Thus also in Gourd's second work, "Les trois dialectiques" (Geneva, Georg., 1897), Philosophy is co-ordination, the orderly arrangement of what we

know. Scepticism presents the highest degree of error. Gourd's philosophical position is frankly dualistic. He distinguishes two chief spheres of human knowledge and reality: the sphere of the Co-ordinable and that of the Non-co-ordinable (incoordonnable), *i.e.*, the Mind's progress from without and from within. The first of these comprises science, ethics, æsthetics, and society; the second, religion. Religion is consequently nothing more or less than the sum-total of all that is non-co-ordinate and beyond law (hors la loi), of all that originates in contrast to the laws of science, ethics, æsthetics, and society. Religion corresponds to the Mind's progress within itself. God is really the highest objective manifestation of the Non-co-ordinable, as evoking with the greatest force the Mind's progress within itself. So far, Gourd's philosophy is fundamentally religious. Religion is at once the root and the crown of his creation. And his posthumous work, published by Charles Werner with a preface by Émile Boutroux, "Philosophie de la religion" (Paris, Alcan, 1911), is unquestionably his most characteristic contribution to philosophy.

Émile Goblot also evinces distinct Kantian-critical tendencies in his zealous efforts to overthrow Empiricism by means of Rationalism. His chief work is "Traité de logique" (Paris, Colin, 1918).

The progress of scientific knowledge, according to him, is the advance from Empiricism to Rationalism. All the sciences are at first empirical, and strive in an increasing ratio to become rational. Mathematics is the ideal of science. But Goblot's Rationalism is essentially anti-metaphysical. To him philosophy is a positive science. At all events Goblot lays stress on the creative rôle of the mind in the origination of scientific knowledge, and, as a corollary, the insufficiency of crude experience. Experience has to be interpreted; this is effected by a conclusion of reason (raisonnement). This process consists in drawing necessary and rationally valid conclusions from empirical judgments. Experience certainly has its part in Induction. But the conclusion in the inductive method is not a judgment of experience.[1] Goblot is probably influenced by the Durkheim School when he declares that Logic is conditioned by Society. For the individual, belief may be useful or harmful: it can only be true or false for a social being. Therefore Rationalism is the result of the expansion of social conditions; the collective convictions of a limited group must be replaced by universal-mediate convictions.[2] The logical conclusion is essentially creative; it presents a new truth not contained in the principles. Induc-

[1] "Traité de logique," p. 84.
[2] *Ibid.*, p. 34 *sq.*

tion and Deduction are different, and yet similar, for both are modes of the working of reason.

Louis Weber's Absolute Positivism may be regarded as a noteworthy attempt to undermine the Comtian Positivism. "Vers le positivism absolu par l'idéalisme"—such is the title of his leading work. There is no existence apart from Thought; the idea of the Object coincides with the Object itself; this is Weber's axiom. He demonstrates that positive science is idealistic from its very being, for it is anything but a mere product of sensuous experience. Experience makes use of the data furnished by the external senses only on condition that each given result is placed under the control of the understanding and submitted to the verdict of reason. Reality is at root the self-assertion of thought. Weber even goes beyond this and declares that science is the denial of the data of perception. Between sensuous knowledge, which is the knowledge of the uneducated, and intellectual knowledge, which proceeds by way of methodical observation, induction, and calculation, science does not hesitate for a moment: science regards the former as individual, subjective, and false, the latter as general, objective, and true knowledge. Hence science is always a becoming; it can only provide a relative knowledge. But true philosophy has to provide knowledge that is absolute and perfect.

And this end philosophy can only attain by dethroning crude empiricism and advancing towards logical idealism, or, what is fundamentally identical, absolute positivism. In his book " Le Rythme du progrès " (Paris, Alcan, 1914), Weber adopts a critical attitude to Comte's Law of the Three Stages.

In the second main group of this critical school one may also place the works on Logic and the Theory of Knowledge of *Adrien Naville*, of Geneva (born 1845). His chief book, " Classification des sciences," is in its essence an attempt to disestablish the Comtian-Spencerian-Positivist classification of the sciences.[1] The chief distinction of Naville's projected classification is this, that it is based, not on the different nature of the services they render to mankind, but on the true nature and relations of the sciences themselves. Now there are three basic questions in science. What is possible (and what is not possible) ? What is real (and what is not real) ? What is good (and what is not good) ? These questions are answered by the three following classes of science : the Sciences of Law or " Theorematics " the Sciences of Fact or History, and the Sciences of the Norm or " Canonics." Naville's definition of Law is characteristic—" a conditionally necessary

[1] " Classification des sciences. Les idées maîtresses des sciences et leurs rapports," 3rd ed., Paris, Alcan, 1920. Cp. also Naville's work on sociology, " Liberté, Égalité, Solidarité," Essais d'analyse, Payot, Lausanne, 1924.

dependence existing between two members." Law thus presents a synthetic and not an analytic relation. To assume the existence of Laws does not involve Determinism. It should also be pointed out that Naville will not hear of the reduction of psychological to physical phenomena, nor of the interpretation of sociological phenomena by psychological. He accepts Free-will.

Dominique Parodi (1870–) in his book, "Le problème moral et la pensée contemporaine" (Paris, Alcan, 1910), stands for a non-metaphysical *Rationalism in Ethics* which has close affinities with Kant. He criticises all attempts to find a precise scientific foundation for morality. Certainly, Ethics must not lose sight of the laws of exact science, since these latter afford more or less effective means for the attainment of its purposes. However, neither Biology, nor Psychology, nor Sociology will ever be able to indicate these purposes and the grounds for deciding between them.[1] Volition and action are not truly ethical until they bear a super-individual stamp. To attain this end we must ask questions of our conscience, *i.e.*, of our *Reason*: a Reason, however, which is free from traditional metaphysics.[2] Parodi agrees with Kant in conceiving of Reason as an essentially formal faculty. He rejects material morality and only acknowledges

[1] "Le problème moral," p. 165. [2] *Ibid.*, pp. 169–72.

the supremacy of formal morality. That morality, too, which depends on self-interest and happiness he also repudiates.[1] Duty and the Good coincide. In this sense there is no morality without obligation and law. Only when an action bears the hall-marks of obligation, super-individuality, and universality can it be called "good," and a morally necessary action.[2]

At the end of his exhaustive work "La philosophie contemporaine en France" (Paris, Alcan, 1919), Parodi gives an outline of his idea of rationalist-critical idealism; he makes an approach to Bergson, in spite of his criticism of the Bergsonian School.

Léon Brunschvicg (1869–)

In the France of to-day, Léon Brunschvicg is unquestionably the leading champion of critico-epistemological idealism. His studies of Pascal and Spinoza, extending over many years, have durably influenced his intellectual development. In his attempt, however, to find a substitute for empiric Positivism on the one hand, and for the Hegelian metaphysical Rationalism on the other, by formulating a critical idealism, his line of thought has an essentially Kantian direction. For our purposes his most important works are: "La modalité du jugement" (Paris, Alcan, 1897);

[1] "Le problème moral," p. 183. [2] *Ibid.*, p. 191.

" L'idéalisme contemporain," 1900; " Introduction à la vie de l'esprit," " Les Étapes de la philosophie mathématique," 1913; " L'expérience humaine et la causalité " (Paris, Alcan, 1922). Brunschvicg has also done meritorious service as a Spinoza scholar, and, with Pierre Boutroux as co-editor, has published a collected edition of Pascal's works.

There can only be true knowledge, in Brunschvicg's opinion, when the mind, no longer following the too hasty judgment of crude experience, seeks independently to interpret the data provided by observation, through the means of the analytical and the synthetical forms of knowledge which are peculiar to it. True knowledge is a progress from Things to Mind. To know is to impose on objectivity the forms of subjectivity. Reality is not in any way separated from the mind; it is a part of the mind's inner development; the mind transforms it, and it passes through every stage of the mind's living evolution.[1] Man's true progress is towards the form of Inwardness; the ideal of Externality has no practical result.[2] The ideal of Inwardness is unity in the speculative and practical sense. To approach this ideal is to rise to greater heights both in science and in practical life. Our destiny lies in the aspiration towards Unity.

In " L'idéalisme contemporain " and the " Intro-

[1] " La modalité du jugement," p. 235. [2] *Ibid.*, p. 243 *sq.*

duction à la vie de l'esprit," Brunschvicg defines Philosophy as the mind's methodical reflection about itself, and he seeks to characterise the whole world, our scientific, moral, æsthetic, and religious life, as a self-realisation of the mind.

Brunschvicg applies the term *Mathematical Intellectualism* to his point of view.[1] He bases the reality of knowledge on a reciprocal adaptation of experience and reason, which shall make experience into an " intelligence en acte," and shall assure for reason the possession of Things. Comtian Positivism would hold that progress is the result of Order, and that the dynamic is the result of the static; Mathematical Intellectualism endeavours to transform logical order into the product of intellectual order.[2] To the experience of empiricism Brunschvicg opposes the experience of Rationalism, which he also terms " expérience humaine " in contrast to the " expérience absolue " of Empiricism. To distinguish his philosophical endeavour from Hegel's Nature-philosophy on one hand, and on the other from the philosophy of natural science as taught by the Kantians and Comtians, Brunschvicg calls it " philosophie de la pensée." [3] In a certain degree he sees in it a return to Metaphysics. He does not

[1] " Les étapes de la philosophie mathématique," p. 498.
[2] *Ibid.*, p. 567.
[3] " L'expérience humaine et la causalité," p. 562.

claim, however, to arrive at a complete picture of scientific knowledge. It is enough for his purpose to trace the course of Thought in all its curves and deviations. Unlike anthropomorphism, which is an unconscious projection of the human soul into things and into God himself, *humanism* leads back the soul to the consciousness of its own proper sphere.[1] In Einstein's theory of Relativity Brunschvicg sees a valuable confirmation of his own conception of the interdependence of reason and experience.

To summarise, Brunschvicg teaches that the critical Idealism, which is a result of present-day natural science, makes it no longer necessary to choose between deductive anthropomorphism (Aristotelian in origin) and inductive naturalism (Baconian and Comtian in type). So in speculative regions he follows in the path of that humanism which Socrates opened up through the discovery of Practical Reason, the path from which Aristotle strayed in his Dogmatic Realism. The world of Idealism is no longer a world which loses its identity in the subjectivity of the individual consciousness, but a world whose reality impresses itself on the intellectual consciousness, the central point in the judgment of truth. Mind and Nature, Man's Destiny and the Destiny of Nature, belong together.[2]

We may bring this section to a close with a brief

[1] "L'expérience humaine," etc., p. 576. [2] *Ibid.*, p. 610 *sq.*

notice of the remarkable Æsthetic Idealism of *Jules de Gaultier*. Now Gaultier was clearly affected by Berkeley, Bergson, and Nietzsche, as well as by the Kantian-Renouverian School of Criticism. In dealing with the Theory of Knowledge he stands for a thorough-going Phenomenalism, far in advance of Kant, and approaching the Idealism of Berkeley. According to Gaultier there is absolutely no inward connection between knowledge and action. He holds that philosophy is not a science of happiness, but only a science of knowledge. From philosophy all ethical considerations are to be excluded. To Realism he opposes an Idealism which teaches that there is no reality apart from Mind: so there is no essential difference between the activity that creates the Object and that which comprehends it: and consequently Object and Subject are the two fragments of one and the same activity, and they coincide exactly. Considered in the light of this idealism, the world of morality, like space and time, is a means to an end that is being realised every moment: *i.e.* it is the production of the phenomenon.[1]

[1] "Les deux erreurs de la métaphysique," in the "Revue Philosophique," Feb. 1909. Other books of Gaultier are: "De Kant à Nietzsche," 1900; "Le Bovarysme," 1902; "Les Raisons de l'Idéalisme," 1906.

III

METAPHYSICO-SPIRITUAL POSITIVISM

We now pass over to a group of philosophers whose main preoccupation is almost invariably this: how to save the independence of the intellectual life, and how to replace Empiric Positivism and the Critical School, in their various phases, by spiritual syntheses of the World and Life which shall be at once experimental and integral. Such is the common direction in the tendencies or stages to be observed in the present-day renaissance of metaphysics in France, varied and occasionally quite independent as these tendencies are. And all these latter-day thinkers confirm more or less consciously the prophecy of Ravaisson, that the universal character of the philosophy of the future would be the dominance of what may be called Spiritual Realism or Positivism, and that the root-principle of this philosophy is the self-knowledge which the mind attains concerning an existence from which every other existence proceeds and on which it depends, which is nothing else than the act of Mind.

Paradoxical and heretical as the statement may seem, for the last fifty years or so the country which was the home of unlimited Empiric Positivism has become the home of the most essentially Spiritual Metaphysics.

In examining the origins of this movement we are able to say: as *Comte* to the first, *Kant* to the second, so is *Maine de Biran* to the third main tendency. This does not involve the drawing of a very rigid line of demarcation between the second and the third main tendencies, for many representatives of the third group are at the same time disciples of Kant and Biran as well. It is first of all evident that, in spite of all the influence exercised on Biran by Condillac and the "Ideologists," the central point of all his philosophical endeavour is his protest against the errors of the sensuous school. Thus Biran energetically combats Condillac's attempt to reduce psychology to physiology, the soul's activity to a mechanical passivity. He disputes the right of sensuous philosophy to banish from the realm of psychology the testimony of the inward sense (sens intime). In opposition to Condillac's static conception of the psychic life, he would set up a dynamic conception; for "passivity" he would substitute "activism"; for the transformed sensation the transformed consciousness. He presses the claims of metaphysics in the realm of psychology and in all

his investigations he makes use of metaphysics. His psychology is metaphysical, his metaphysics psychological. In Biran's view true reality is the inner life, the invisible intellectual activity, for man is an intellectually and morally free being. What makes a man is the *Will*. Fact number one in the consciousness of self is the self conceived as cause, power, volition, effort, not in the Cartesian sense as thing or substance. Between Brain and Thought there is in Biran's opinion a great gulf fixed. It is not possible to give bodily location to this or that psychical function. Man does not live his full life until he lifts himself above the purely animal and the purely human life and attains to the *life of the spirit*, that is to say, a life in which nothing occurs in senses or imagination that is not willed by the self, or suggested and inspired by the highest power to which the self can rise, with which it can unite. So far it is right to say: Biran's philosophy is essentially religious, and his religion is a philosophical religion. And, finally, Biran is a precursor of the psychology of the unconscious and of the method of self-observation.

It is beyond the scope of this work to enumerate the various points of contact between Biran's teaching and present-day French philosophy, and thus it is impossible adequately to emphasise the immense influence that Biran has exercised in philosophy and

in psychology. We have limited ourselves to a necessary minimum.

Félix Ravaisson-Mollien (1813–1900)

Amongst the philosophers of the nineteenth century Ravaisson, side by side with Bergson, is perhaps the most loyal successor of Biran in his spiritual idealism. We may mention: his doctoral dissertation "De l'habitude," 1838; "Essai sur la métaphysique d'Aristote," an unfinished work, of which only two volumes appeared (Paris, 1837–1846); "La philosophie en France au XIXième siècle" (Paris, 1868). Ravaisson's masters in philosophy, not to speak of Biran, were Aristotle, Pascal, Kant, and above all Leibnitz and Schelling. But in general he remained faithful to the teaching of Biran. Ravaisson's prediction as to the philosophy of the future,[1] quoted above, is most applicable to himself; he is an enthusiastic representative of Spiritual Positivism. Ravaisson ascribes to Biran the merit of discovering that *effort* is the medium between the Absolute and the self and at the same time is the effect of things on ourselves, in the form of Resistance. He himself discerns in effort or exertion (effort) not merely the first condition, but the perfect type and essence of consciousness.[2] Habit he explains by the evolution of a spontaneity

[1] Cp. above, p. 137.

[2] "De l'habitude," "Revue de Métaphysique," 1894, p. 13.

which is simultaneously passive and active, and is equally removed from mechanical necessity and deliberating freedom.[1] The necessity of Habit is no external necessity of compulsion, but a necessity that springs from inclination and desire. Habit is a law of grace; it is the final purpose, which is continually gaining the upper hand over the efficient cause and assuming this dominance as its own. While Habit has its origin in the clear regions of the consciousness, it brings with it light for the depths, light to illuminate nature's darkness. Habit is the bond that unites all creatures of nature. It is Habit that makes Nature one. The lower can only be explained by means of the higher. Yet Habit is evidence that *freedom* has penetrated into the *necessity* of Nature.[2] True Reality lies in the mind's inward activity: and Love is its deepest root.

There is also individuality in Ravaisson's conception of Beauty as the Mind made manifest in Matter. The forms of beauty express with the utmost possible perfection the soul's inner being, which is Love; this is the purport of the article entitled "Dessin." This is the only sense in which Art can be defined as imitation. In his summary of the Philosophy of the nineteenth century in France Ravaisson demonstrates that all the leading minds in French philosophy in the nineteenth century, and not himself

[1] "De l'habitude," p. 20. [2] *Ibid.*, pp. 32–3.

alone, have acknowledged Spiritual Idealism to be the true philosophy. They have one and all rejected mechanism as the final goal of things: as "ground" and principle of all they have conceived the living, conscious, and personal Spirit. Ravaisson, like Cicero, calls Materialism the "Plebeian Philosophy"; Spiritual Idealism, on the other hand, the "Aristocratic." Ravaisson's next attack is directed against Intellectualism. He is convinced that true knowledge can only be attained by the path of intuition, of feeling, and of the heart. Closely connected with this is Ravaisson's belief that true Metaphysics is ethical and that there can be no morality without Metaphysics; and that the connection of Philosophy and Religion is similarly close.

Charles Secrétan (1815–1895) was a Swiss of Canton Vaud, but his philosophy has deep roots in the nineteenth-century movement amongst French thinkers. Between Secrétan and Ravaisson there is certainly a close affinity. They are both disciples of three great masters: Leibnitz, Schelling, and Biran. In Secrétan, Schelling's influence preponderates; in Ravaisson, Biran's. Secrétan's chief work, "La philosophie de la liberté," Paris, 1849, is inspired throughout by the spirit of Schelling's teaching.[1] Secrétan is essentially a moralist. The object of his

[1] Of Secrétan's other works may be mentioned: "De la philosophie de Leibnitz," 1840; "La raison du christianisme."

metaphysics is to find a foundation for morality, and in doing so, to discover a pathway to religion, even to Christianity. Philosophical thought is a descent from the universal to the particular, from the absolute to the relative. In this way human free-will assumes absolute free-will and the free-will of God. To be really independent in action is to be *Mind.* As in Biran and Ravaisson, Mind is synonymous, not merely with free-will and independence of action, but also with will. Will is the root, the unity, the real substance of Mind.[1] Will is, according to Secrétan, the sphere in which absolute freedom asserts itself. God, in his relation to the world, is the Absolute. Love is the motive of creation. The Ethical Imperative runs: "Thou shalt realise thy freedom."[2]

Jules Lachelier (1834–1918)

Lachelier, side by side with Ravaisson, is the leading immediate pioneer of the renaissance of spiritual-metaphysical Positivism in France. For eleven years he taught at the École Normale Supérieure and so exercised a potent influence on the present generation of French philosophers. His chief works are: "Du fondement de l'induction" (doctoral thesis, 1871) and "Psychologie et Métaphysique," 1885. Lachelier undoubtedly owed most

[1] "Philosophie de la liberté," pp. 336, 342.
[2] *Ibid.*, Lecture XXXVI.

to Kant: yet he is not a one-sided Kantian. We can discern in him decided signs of the influence of Leibnitz, Biran, Schopenhauer, and Ravaisson. The idea of spiritual realism was Lachelier's own invention. Ravaisson's fundamental conviction, "Mind *really exists*," is the beginning and end of Lachelier's philosophy, although he defends with equal force the validity of the Idealism which originates with Aristotle and Kant; with Lachelier everything is Thought.

Lachelier will have nothing to do with Empiric Positivism. This repudiation is essentially in the spirit of Kant's critical doctrine. Lachelier demonstrates that scientific knowledge is no mere servile copy of experience and phenomena; it is the creation of Mind, for it is conditioned by a priori elements. Empiricism, he says, is not an adequate ground of induction, for the latter rests on the twofold principle of efficient causes (according to which one phenomenon precedes another and conditions it) and final causes (according to which a *whole* creates the being of its own parts).[1] But just as inadequate is the eclectic doctrine of Substances and Causes (*e.g.*, Cousin's theory). We must look rather for the grounds of induction in Thought and its relation to phenomena.[2] Finality is the sole complete explanation c

[1] "Fondement de l'induction," p. 12.
[2] *Ibid.*, p. 42.

Thought and Nature,[1] *i.e.*, the explanation that does not descend from cause to effect, but ascends from purpose to means. Consequently it is not universal Necessity, but universal Contingency, which is the true definition of being, which is as well the soul of nature and the last word of thought.[2] Thus, as the realm of final causes penetrates into the realm of efficient causes, without destroying it, it everywhere substitutes force for inertia, life for death, freedom for fate. Therefore Spiritual Realism rather than Materialist Idealism is the true philosophy of Nature. Such a philosophy is indeed independent of any religion. But in placing Mechanical Necessity under the rule of Teleology it makes us prepared to subject Teleology itself to a higher principle, and to pass beyond the bounds of Thought and Nature alike by means of an act of faith.[3]

The return to metaphysics is especially clear in Lachelier's treatise " Psychologie et Métaphysique." He arraigns the " epiphenomenal " conception of the consciousness. Thought, he decides, is not a product of Perception : Perception is much more a work of Thought. The primary nature of consciousness is itself a primary fact. Knowledge begins with a free act, and the last word of absolute thought, expressed in things and making these things real, is

[1] Fondement de l'induction," p. 83.
[2] *Ibid.*, p. 86. [3] *Ibid.*, p. 101 *sq.*

freedom. Lachelier's spiritual idealism is essentially based on Free-Will, and his doctrine of Free-Will is essentially spiritual. The ultimate foundation of all truth and all existence is nothing other than the absolute spontaneity of Mind.[1] Psychological analysis must be complemented by metaphysical synthesis; in which connection Lachelier defines metaphysics as "the science of thought in itself, of light at its source."[2]

Séailles has recently published selections from Lachelier's courses at the École Normale, from which it is clear that Lachelier's spiritual realism, like Ravaisson's, has an ethical and religious stamp.[3] To make Thought one's aim is to strive for the only real Good. Death of the life of the senses is the same as resurrection into eternal life. Duty is the fulfilment of our destiny, the suppression of all sensuous illusions, the realisation that God in Man is real and immortal. To reduce everything to Thought is to reduce it to God. And so, for Lachelier, the religious life is the highest form of the intellectual life.

Paul Janet (1823–1899), in spite of his eclecticism, deserves consideration as a follower of Biran and as a pioneer of present-day Spiritual Positivism. Among his numerous works we are chiefly concerned

[1] "Psychologie et Métaphysique," p. 158. [2] *Ibid.*, p. 172 *sq.*
[3] Cp. Séailles, "La philosophie de Lachelier," Paris, 1920, Alcan.

with: "Les causes finales," 1877; "Principes de Métaphysique et de Psychologie" (2 vols. 1897, Paris, Delagrave). Janet's Eclecticism is a method rather than a doctrine. The really important thing involved in it is, not so much the marshalling and comparison of quite heterogeneous opinions, as the dethronement of Empiric Positivism and the attainment of a Spiritual Positivism, far more by means of the content of consciousness and by the conciliation of opinions which are only apparently contradictory. Bergson's productive work has undoubtedly been greatly helped by his study of Janet's writings. Janet himself confesses that he remained true to Biran's teaching when he granted hat the conditions of existence in general are discovered by consciousness in the conditions of its own existence. Janet's metaphysical doctrine is essentially psychological and his psychology metaphysical. The task of metaphysics is to elaborate the fundamental facts of consciousness. In opposition to the Comtian unilinear classification of the sciences he sets up a bilinear classification: Sciences of Nature, Sciences of the Mind. As for different philosophical systems, Janet arranges them in the following gradation: Materialism, Positivism, Phenomenalism, Critical Naturalism, Idealism, Pantheism, Spiritual Idealism.

Alfred Fouillée (1838–1912)

Fouillée's work also has a decidedly eclectic stamp. In spite of his very definite idealistic attitude he aimed at carrying on Leibnitz' great work of reconciliation, *i.e.* to bring into harmony Idealism and Positivism, Intuitionism and Intellectualism, Free-will and Determinism, Platonism and Darwinism, Science and Philosophy. At the same time Fouillée is a "bonny fighter" and dialectician. Most of his views have their origin in his polemic. Thus his theory of Power-Ideas (*idées-forces*) is a rejoinder to the doctrine of reflex ideas taught by Spencer and Huxley; and in his "Will to Consciousness" he would gladly overthrow at one and the same time Schopenhauer's blind "Will to Live," Nietzsche's "Will to Power," Hartmann's "Philosophy of the Unconscious," Anglo-French Pragmatism, Boutroux' doctrine of Contingency, and Bergson's Anti-intellectualism. Fouillée too was under the influence of Biran, but he owes most to Plato and Leibnitz. Together with other critics of exact scientific knowledge and empiric Positivism Fouillée attacks the presumption of many exact scientists, who have taken it upon themselves to apply the methods of their own science to new departments, and, dazzled by their success in their own sphere, think they hold a master-key to open up all

problems. In Fouillée's opinion the positive sciences never give more than a partial knowledge: what they contemplate is the mere "section" or "individual phase," and never the totality. In the eyes of the positive sciences the world is never anything more than a broken mirror. Philosophy brings the broken pieces near to each other, and so attempts to see the whole picture. The aim of positive science is the determination of objects by each other: the aim of philosophy is the determination of objects through the subject that feels, wills, and thinks. Philosophy must admittedly, while giving every possible consideration to the demands of intuitive feeling, of instinct, and of sympathy, maintain its distinctive character as a *comprehension* of the Real.[1] In another passage Fouillée defines philosophy as universal psychology.[2]

Fouillée's view of Life and the Universe may thus be characterised as Spiritual Monism, or as Psychic Dynamism, as evolution based on the Power-Ideas. Fouillée is a metaphysician and knows it. He endeavours, so to speak, to bring down the Platonic Ideas from heaven to earth, by undertaking to show that in every idea there lies a *force* which realises

[1] "Esquisse d'une interpretation du monde," Paris, Alcan, 1913, p. xix. Among Fouillée's numerous other works we may mention: "La liberté et le déterminisme," 1872 (doctoral thesis); "L'évolutionisme des idées-forces," 1890.

[2] "Esquisse," etc., p. xxv.

itself in proportion as it conceives and desires its own realisation. The conception Idée-Force permeates the whole philosophic work of Fouillée, and explains all. The Power-Idea is the unity of Thought and Action, which cannot be shaken. Every state of consciousness is an Idea, so far as it involves any sort of judgment whatever; and a power, so far as it involves any sort of superiority: so that at the last every psychic power is a volition.[1] In opposition to Condillac's sensuous doctrine Fouillée conceives all manifestations of life, and not alone the life of the Soul, as transformed consciousness.[2] The Power-Idea brings Fouillée as well to a conception of evolution radically opposed to that of Herbert Spencer. It is his aim to restore to Determinism the idea of freedom and the wish for it: to bring back to the evolution of nature psychic factors and states of consciousness: and in the evolution of society to win recognition, not merely for rights, but also for the effective influence of the *ideal*. Finally, he shows that in Sociology the Power-Ideas are the expression of thoughts which are elaborated through mankind as a whole, just as the feelings and propensities corresponding to these thoughts. Collective Ideas are also *collective forces*, methods of action and of guidance, which assure the influence of society as a whole over each of its mem-

[1] "Psychologie des idées-forces," I, Introd. x.
[2] *Ibid.*, II, p. 410.

bers, without impairing the power of the individual to react on the community. Sociology is capable of conferring on us the power to see into the depths of the profoundest laws of Cosmology.[1]

J. M. Guyau (1854–1888)

J. M. Guyau occupies a unique position in the French philosophic movement of the immediate past.[2] There are features in him characteristic of empiric Positivism. Of such a nature is his preference for a strictly scientific, positivistic, inductive method based on facts, and, generally speaking, his outlook on life, which is essentially evolutionist-sociological and influenced by the predominantly Comtian-Spencerian spirit of his age. In the sphere of *Ethics* he will have nothing to do with precepts; he is content to bring out moral facts (instincts, attractions, repulsions). From the standpoint of "true scientific ethics" he regards the preservation and highest possible intensification of Life as the real spring of human action, as in general of every instinctive effort.[3] In the realm of morals he absolutely rejects the Supernatural. To the Kantian imperative "You

[1] "Évolutionisme des idées-forces," xcii *sq.*

[2] We may mention among his works: "Esquisse d'une morale sans obligation ni sanction," 1885; "L'irreligion de l'avenir," 1887; "L'art au point de vue sociologique," 1889. Several of his works have been translated into English.

[3] "Esquisse," etc., p. 11 *sq.*

can, for you ought," he sets in opposition the auto-suggestion "I can, therefore I ought."[1] In the sphere of Religion he would wish to replace the dominant positive religion by "Irreligion," which he conceives essentially in a social sense.[2] He rejects every supernatural or traditional authority, every revelation, every miracle, every myth, every compulsory form of worship. He believes that at the present day Science can offer a complete substitute for everything that Religion has been in the past.[3] And, to conclude, Guyau is convinced of the high importance of being scientific in the sphere of *Æsthetics* as well. He endeavours to transform Æsthetics into a science of Law. He stands for a biological-vitalistic conception of Beauty and Art.

It would be quite wrong, however, to regard Guyau as a representative of Empiric Positivism—a view that becomes less tenable than ever when we remark the emphatic nature of Guyau's opposition to Spencerian Evolution. In this he is greatly influenced by Fouillée, Plato, and Kant. Guyau is a metaphysician by the "grace of God," whether consciously so or not. In saying, *e.g.*, that the principle of action is the greatest possible broadening and deepening of life, both physical and intellectual, he is above all thinking of an inward enrichment of individual and com-

[1] "Esquisse," etc., p. 247 *sq.*
[2] "L'irreligion de l'avenir," pp. ii–iii.
[3] *Ibid.*, p. 302.

munal life. To act morally is to rise beyond the bounds of the merely individual, of the merely social, indeed of the merely human life, and to feel oneself at one with the universe. " Irreligion," too, is by no means synonymous with unbelief or a contemptuous rejection of the moral and metaphysical worth of the old beliefs. On the contrary, the " Irreligion of the Future " will keep all the purest element in religious feeling, which has now become a dead letter: this is " on the one hand wonder before the cosmos and the infinite forces which are displayed within it; on the other hand, the striving to reach an Ideal which shall be more than individual, more than social, which shall be cosmic, and shall extend beyond the data of physical and social reality." [1] Equally spiritual is Guyau's conception of Beauty and Art, when he defines as the task of the artist " while arousing the deepest sensations of Being, to wake to life as well the most moral feelings and the loftiest ideas of the intellect." [2]

Émile Boutroux (1845–1921)

Amongst all the French philosophers of the present and of the immediate past the greatest influence has unquestionably been wielded by *Émile Boutroux*. Present-day French philosophical teachers are almost

[1] " Irreligion," p. xiv.
[2] " Les problèmes de l'esthétique contemporaine," p. 81.

all to be numbered as his disciples. In saying this we would refer, not merely to his influence as a teacher of the History of Philosophy at the École Normale Supérieure and at the Sorbonne, but also to his two books, short indeed but important, " De la contingence des lois de la nature " (doctoral thesis, 1874) and " De l'Idée de loi naturelle dans la science et la philosophie contemporaines," 1893.[1] These works have proved to be a powerful stimulus to the movement which aims at a criticism of exact science, as indeed will be already evident from a study of the preceding pages. Our reason for dealing with Boutroux in this section, that is to say, after the work of certain of his followers has been examined in the preceding section, is this: his chief work, " De la contingence des lois de la nature," is first and foremost a continuation of that spiritual metaphysical philosophy as the chief pioneers of which movement we have already noticed Biran, Ravaisson, and Lachelier. When compared with Bergson, Boutroux is essentially an adherent of the critical, idealistic, and rationalistic schools. Aristotle,

[1] Among Boutroux' other works may be mentioned: " Études d'histoire de la philosophie," 1897; " Science et Religion dans la philosophie contemporaine," 1908. In addition to this, Boutroux translated E. Zeller's " Philosophie der Griechen." Several of Boutroux' books have been translated into English, and many articles on his teaching, by the Editor of this series of Contemporary Thought and others, have appeared in English journals.

Descartes, and above all Kant have exercised a lasting influence on his thought. And yet, in the struggle for a Spiritual Positivism, he is Bergson's immediate precursor.

The basic intuition of Boutroux' teaching is this: the fundamental element of Reality is *Freedom*. Note in this connection a characteristic utterance of 1914: "I started from Natural Science, which compels recognition as a real fact, and which I do recognise as such. I have tried to show that science offers no contradiction to ideas such as individuality, finality, freedom, and the like, which are the basis of our ethical convictions; the collapse of which ideas would necessarily involve the collapse of these convictions. To this end I was bound to demonstrate that science does not necessitate the rigid dogmatism and determinism that so often shelter under its name." In fact, Boutroux never did lose touch with natural science, thanks to the influence of his brother, Léon Boutroux, and his brother-in-law, Henri Poincaré. And yet the chief motive force in all his work is his firm conviction that scientific fanaticism and naturalism are inadequate and intolerable. We grant that Boutroux is by no means the first and the only philosopher who has attacked Naturalism. His original contribution is this, that he takes his stand on the enemy's position, and thus endeavours to destroy the heresy at its

root. He proves that the view of Nature given by Naturalism is a monstrous thing and incompatible with the realities of science itself. In Nature there are only stages of freedom. The Real cannot be deduced from the Possible, as the conclusion of a syllogism is deduced from its premises. Reality is richer than Possibility. Hence existence presented as real is not a necessary consequence of the Possible: it is only a *contingent*, that is, a free form of it. The notion of uniformity and immutability is foreign to an existence given as such. The progress of observation discovers singularity, variety, individuality, life, where external appearance revealed nothing but homogeneous and undifferentiated masses. The principle of causation can never be applied to the real and concrete world. For there, from the point of view of quality, the effect is not commensurate with the cause. The whole Reality shares in a Freedom, although it is not Freedom itself. Hence the *Contingency* of the laws of nature, which is absolutely different from blind chance. Boutroux draws a sharp distinction between " contingence " and " hasard." If chance were the begetter of things, we could only speak of a chaos, and not a universe. Contingency, on the other hand, bears witness to a mighty harmony in the universe, and proves to us that God is the Creator, not only of the essence, but also of the existence of things.

Absolute Necessity, according to Boutroux, is as foreign as Chance itself to the actual existence of things. Whatever happens, happens neither necessarily nor accidentally; it happens contingently, freely; it is the expression of a World-Consciousness, a World-Reason, an eternally creative activity. From this springs Boutroux' devastating criticism of Determinism. Everything that possesses qualities partakes, as a natural consequence, of fundamental indeterminateness and mutability. The Law of Causation is a practical principle for science alone; it cannot explain the general intrication and interpenetration of things. In respect to quality, cause and effect are fundamentally disproportionate to one another. The effect is different in nature from the cause; if nothing *new* were contained in the effect, cause and effect would not vary from each other. Thus, in Physics and Chemistry, the most elementary and universal laws display absolutely heterogeneous relations between things, so that it is impossible to say that the consequent is proportional to the antecedent. The laws of nature have no absolute existence, no iron necessity: they are much more to be regarded as the expression of an ethico-æsthetic stage in things, as the fixed and artificial picture of a model that is essentially a living and moving reality.

Boutroux distinguishes two kinds of Natural

Laws: those that approach to mathematical consistency, that possess in themselves a strong tendency to elaborate and clarify the idea; and those that approach to observation and induction. The former kind express a necessity which is rigid, if not absolute; but they are abstract and not competent to fix details and the actual form in which phenomena are realised. The latter kind obviously have to do with details and with the reciprocal relations of complex and organised unities: they are consequently more competent than the others to fix and determine phenomena. But their sole foundation is experience and they connect two heterogeneous factors, and they cannot therefore be looked upon as unconditionally necessary. Thus Necessity and Determinism are different things.

The great error of Determinism is its belief in the omnipotence of the mathematical method. Now mathematics is only necessary in virtue of suppositions, the necessity of which it is impossible to prove: consequently mathematical necessity is, in the last resort, nothing more than a hypothetical necessity. And again, mathematics can only be applied to reality by way of approximation. Determinism implies universalisation and the overstepping of boundaries. Some concrete sciences approach the rigidity of mathematics, and so it has been taken for granted that all the sciences shall attain the same

degree or accuracy. But this generalisation is purely theoretical. In fact, the discrepancy between mathematics and reality is still infinitely great; the real and the mathematical are in their very nature incommensurate. Living reality is incalculable, just because it is a continuous creation, an upspringing of something *new*. Hence Boutroux challenges the presumptuous claim of the exact sciences to raise mathematics and mechanics to the position of an absolute standard for judging whether a method is scientific or not. Science, considered as the sum and substance of the sciences, is an abstraction. We have individual sciences, each of which is connected with the rest, but possesses a character peculiar to itself, evidence peculiar to itself, and is consequently not to be referred back to the science that preceded it.

As another characteristic feature of Boutroux' "Philosophy of Discontinuity" we may consider his attack on the doctrine of the mechanical-intellectualistic conception of life. "Nothing originates and nothing perishes" becomes less and less tenable as one advances from lower to higher forms of life. Life is continuous creation. Every living thing is an individual existence, and as such possesses an original character, which cannot be referred back to lower forms of life. Above all, between Man and other forms of life there exists not only a difference in degree, but a difference in

essence. Man is *par excellence* a free creature. Boutroux would say with Goethe " Nur allein der Mensch vermag das Unmögliche." Human life is an imitation of God. This is brought about by thought, feeling, and volition, or by science and art, by ethics and religion.

The power through which man comprehends the nature of concrete, really living Reality is called by Boutroux " Reason," and the science which provides us with this knowledge Metaphysics or Philosophy. This implies that Boutroux will have nothing to do with " scientific philosophy " understood as a summarisation of the results of the individual sciences. Philosophy transcends mere experience: and thus enables us to comprehend not merely phenomena and laws, but real causes, that is, those that are endowed with a faculty of change and persistence.

What really constitutes the greatness of man is the fact that he can become *inwardly* free. Man is not the slave, but the builder, of his character. " At the last thou art, what thou dost "—in such terms would Boutroux improve on that well-known phrase of Mephistopheles and Schopenhauer. The actions of an individual are not determined by his character. There is no such thing as an unalterable character. It is more correct to say that his character is determined by his actions. Human nature, like the world

as a whole, is in constant process of creation. Freedom is the root of our being. Therefore "to live" for man does not mean a struggle for mere existence, but for wider existence, *i.e.*, for an extension of the realm of free-will. Happy is he who comes the nearest to this goal, by conquering his own egoism and by loving his fellow-men—in God.

Thus Religion is the soul of Boutroux' philosophy. For him Reason is no mere faculty of knowing, devoid of quality; it is the ability to grasp the relation of the Real and the Ideal, of World and God. Freedom of the Will is not an abstract psychological freedom; it is the capacity to choose between good and evil. Freedom of action is the uplifting of the self to the highest possible degree of godlike perfection, by practical participation in the service of mankind.

Gabriel Séailles (1852–1922) in his chief work "Essai sur le génie dans l'art," 2nd ed., 1897, carries on the effort to produce a Spiritual Positivism. His view is essentially directed to Æsthetics and the Philosophy of Art. Although Séailles feels himself to be above all a follower of Jules Lachelier, there are in this work clearly marked traces of the influence of Ravaisson, to whom it is dedicated. Séailles holds that Beauty must be defined through Mind. And Mind is not passive, but creative.[1] The

[1] "Le génie dans l'art," 2nd ed., pp. viii–x.

sympathy which beauty inspires comes from no other source than from the fulness of the intellectual life which constitutes its being. The perfected work of Art is just the mind of the artist made manifest in the body that he has created.[1] Artistic genius is perhaps the most general fact of Inwardness. Genius is Mind reaching its highest level at the moment when it steps beyond reflection and becomes natural in the higher sense. The life of the Mind is a continuous creativeness.[2] Bergson, as is well known, adopts this view of Art and Life. It is possible to go further, and to find in Séailles a dynamic conception of genius and intellect. To love Beauty is to participate in the genius that has created it. But, emphasising as he does the close connection between Art and Nature, Séailles rejects ultra-rationalism on the one side and superficial realism on the other. Although genius does not philosophise about its creations, genius is reason itself. Art is not an imitation of a non-spiritual Nature; it is the new creation of Nature by the Mind that produces her. There is little danger in Naturalistic Realism, for its teaching is impossible.[3] The Beautiful exists neither outside Nature nor in Nature, but in Mind.[4] All creation is Poetry.

[1] "Le génie dans l'art," p. 229.
[2] *Ibid.*, p. 258. [3] *Ibid.*, p. 283. [4] *Ibid.*, p. 284.

Jean Jaurès (1859–1914)

The doctoral thesis written by the famous socialist leader, Jean Jaurès, " La réalité du monde sensible " (Paris, Alcan, 1891), is of twofold importance, first, as a metaphysical basis of Socialism, and secondly, as a contribution to the struggle towards a Spiritual Positivism. In this work Jaurès challenges the teachings of sensationalism and subjectivism as based on the Theory of Knowledge. As a metaphysical realist he conceives Knowledge as an act of reciprocal interpenetration and solidarity on the part of Man and the World.[1] Reality is no crude force; it is Consciousness, Reason, Mind, Unity, God. I can only say " I " just as far as the Infinite and the Absolute says " I." Without a " Thou " there is no " I." Jaurès says with Paul " In God we live and move and have our being." To this extent we find in Jaurès a religious-pantheistic metaphysics, according to which the World, God, and Consciousness are essentially one. This doctrine brings with it important consequences for psychology as well. It is not true that the world is a brain: the brain is contained in the world.[2] All the spheres of the world interpenetrate and modify each other. Without going so far as to say with Bergson that the body is an instrument of the mind, Jaurès most

[1] " La réalité du monde sensible," p. 322 *sq.* [2] *Ibid.*, p. 335.

emphatically rejects the epiphenomenal conception of consciousness. The brain, considered as a crude system of motion, is as little able to originate thought as the matter, considered also as a crude system of motion, is able to do so.[1] To sum up, in every individual consciousness there is an absolute consciousness, independent of each and every transitory organism, everywhere present and nowhere fixed, for it has no central point except the Infinite itself.[2] An exposition of the consequences for Socialism of these metaphysical views will be found in Charles Rappoport's book: "Jaurès, l'Homme—le Penseur —le Socialiste" (Paris, 1915).

André Lalande (1867–)

The very title of André Lalande's doctoral thesis—"L'Idée directrice de la Dissolution opposée à celle de l'Evolution dans la Méthode des sciences physiques et morales" (Paris, Alcan, 1898), shows that we have here to do with an attempt to replace the Spencerian mechanistic Evolution by a synthesis of life which shall be tinged with the spiritual. The main mistake of Spencer's evolutionary teaching, according to Lalande, lies in his purely physical interpretation of all the processes of the universe, in his intolerable psychophobia and in his bias to define evolution as differentiation, *i.e.*, as a merely

[1] "La réalité du monde sensible," p. 356. [2] *Ibid.*, p. 368.

accidental transition from the homogeneous to the heterogeneous. In opposition to this, Lalande holds that such a transition is indeed necessary to development, but that it is not enough to make up the whole of the process, and that consequently true progress in the sciences of nature and mind consists of an *Involution* [1] from the heterogeneous to the homogeneous. To prove this, Lalande examines four main types of Involution: *mechanical*, *physiological*, *psychological*, and *sociological* involution, and thus gives the outline of a comprehensive synthesis. He arrives at this result, that Spencer's Monism, as a hypothesis for the evolution of the sciences, is utterly untenable, for a precise observation of the nature of things permits us to discern in them two modes of action which continually complement each other. So in mankind we find two tendencies: one, the stronger and better organised, leads to Individuality; the other leads to assimilation with our neighbour.[2] In the realm of the True, the Good, and the Beautiful every action, every word, every thought causes the world to progress in a direction opposed to evolution; that is to say, these expres-

[1] In a later work, Lalande uses this term in preference to Dissolution. We consider it proportionately the clearer of the two, and propose to use it wherever Lalande employs the term "Dissolution." Approximately synonymous are: Assimilation, Unification, Identification, Deindividualisation.

[2] "L'idée directrice de la dissolution," p. 390.

sions of the spiritual life lessen the individual differentiation. They bring it about that human beings become less different from each other, and that every human being seeks no longer, like the animal, to compress the world into the formula of his own individuality, but endeavours to break loose from the barrier of selfishness which nature sets up around him, and to identify himself with his neighbour. The path which leads from the general to the individual leads to nothing.[1] It is only the path from the particular to the general that leads to anything. Thus *involution* must be the guiding principle of action. The transition from the heterogeneous to the homogeneous, the advance from the manifold to the one, satisfies the fundamental tendency of thought. If we follow Lalande, this advance is the victory of Mind over Nature or over Matter. Truth, Beauty, Justice, Love—they are all of them the consciousness reached by man of the work of involution effected upon nature. By gradual, patient, painful conquest of organic matter the mind can complete its transformation and reach emancipation.[2]

In his works on moral philosophy and education, Lalande tries to make a practical application of his philosophical views by pointing to the possibility

[1] "L'idée directrice de la dissolution," p. 434.
[2] *Ibid.*, p. 459.

of an agreement as to the rules of moral conduct, in spite of the diversity—one might even say of the contradictoriness—of the metaphysical principles and their special application.

The best practical realisation of this theory of involution is unquestionably the "Vocabulaire philosophique" undertaken by Lalande in 1900 with the co-operation of the Société Française de Philosophie. At the inception of this work, Lalande starts from the convinced belief, set forth in his chief work, that truth is not the arbitrary production of an individual thinker, but that it can rather be demonstrated and defined by the co-operation and agreement of various minds. This dictionary is therefore of worth, not merely as a lexicographical product, but especially as a mirror of the collective philosophic movement in the France of to-day.

Lalande's theory of involution also inspired the "Société Française de Philosophie" founded in 1900, organised and so ably conducted by *Xavier Léon*. For a knowledge of contemporary thought in France the "Bulletin" of this association is indispensable. It was Lalande and Xavier Léon as well who initiated and supplied the motive power for the presence and organisation of the first International Congress for Philosophy at Paris in 1900. And finally Lalande as the systematizer of involutionism is a warm supporter of the

international language known as "Ido," in the propaganda for which he co-operated with Couturat and others.

In this connection it is well to refer to a philosophic undertaking of the first order: the foundation of the "Revue de Métaphysique et de Morale" in 1893. The title of this review implies that the founders, under the leadership of Ravaisson, are consciously combating Positivism on its empiric side, and seek to contribute to the realisation of a metaphysical and spiritual Positivism. This review is still edited by Xavier Léon, and is an example of what a philosophical review should be.

The attempt of *Charles Dunan* to find a substitute for Positivism on its empiric side is extremely interesting.[1] In empiricism Dunan beholds, not a philosophic system, but the negation of all philosophy. He finds the germ of real philosophy in Plato and Aristotle, for Plato discovered the reality of the Idea and Aristotle justly discerned that the Idea may not be separated from its manifestation. To throw metaphysics overboard out of compliance towards a supposed Positivism is nothing but sheer blindness. Philosophy is, if anything at all, the doctrine of the meaning and value of life, of good and evil, of right and duty, of the worth and nature of things. To prevent the intellect of man from

[1] Cp. "Les deux idéalismes" (Paris, Alcan, 1911).

exercising certain of its natural powers, because they have been hitherto misused, would be equivalent to crippling it.

Henri Bergson (1859–)

Bergson's lifework is at once the culminating point and focus of all the progressive tendencies in French philosophy of the present day. It may be figured as the triumphal song of metaphysico-spiritual Positivism. There are certain of the most typical desires and demands expressed by philosophers of the second and third main group that find in Bergson their most courageous interpreter: viz., the numerous forms and nuances of the struggle against Positivism on its empiric side and the imperialism of the exact sciences, anti-mechanism in biology and psychology, anti-determinism, contingentism, anti-spencerianism, anti-intellectualism, and finally the will and the power to metaphysics. But more than all this, Bergson is carrying on at the present day the work of Biranism; and in making this assertion we would neither depreciate Bergson's own originality nor the influence exercised by thinkers like Plotinus, Spinoza, Berkeley, Kant, Schopenhauer, Ravaisson, and Lachelier, upon his intellectual development. And yet Bergson's philosophy is not to be pigeon-holed under the label of any existing "ism." He has raised it up

from the innermost depths of his personality: and into these depths we are bound to gaze.

Bergson's most important works are: his doctoral thesis "Essai sur les données immédiates de la conscience," Paris, 1889 (dedicated to Lachelier); Matière et Mémoire," 1896; "Le Rire," 1900; "L'Évolution créatrice," 1907; "L'Énergie spirituelle," 1919; "Durée et Simultanéité," "A propos de la théorie de la relativité d'Einstein," 1922. (Alcan of Paris.)

On the occasion of the Fourth International Congress for Philosophy at Bologna Bergson delivered a lecture on "L'Intuition philosophique." Amongst other statements he observed that a genuine philosopher, however manifold his works may be, has, in the last resort, one single message to proclaim. So let us ask, What is Bergson's message? In this connection, too, Bergson apparently wishes to lighten his interpreter's task, for some years ago in a letter to Höffding he emphasised, as the very centre of his philosophy, not so much the doctrine of Intuition as "l'intuition de la durée." What did he mean? To give an adequate answer to this question we must project ourselves, by an act of sympathetic imagination, into the centre of Bergson's way of thinking. And then we find at the very core this thought: the conception of Life means a *creative becoming*. Long years of occupation

with mathematics and mechanics and of absorption in the profundities of psychic phenomena have brought Bergson to this conclusion. He discovered a radical difference between the idea of Time as presented by mathematics and mechanics and the concrete Duration in Time as it is present in the life of the soul. Mathematical Time is simultaneity: the very nature of what happens in the soul is heterogeneity, incessant change, progress, qualitative difference, motion, interpenetration, in a word, creative evolution. Or, to use his own words: "Pour un être conscient, exister consiste à changer, changer à se mûrir, se mûrir à se créer indéfiniment soi-même. Il en est de même de l'existence en général." [1] Thus Bergson extends his conception of the psychic life until it covers all life. All that is not concrete duration in time, all that is not creative becoming, he calls Space: and ever in his books there reappears the emphatic difference between the World of Space and the World of Time. In making this contrast, Bergson is endeavouring in no way to set a gulf between the two orders. His aim is to bring the absolutely original character of the intellectual life into greater prominence. Bergson's definition, "Change constitutes the substance of Things," might just as well run: *True reality is creative mind.* At all events, this essential

[1] "Évolution créatrice," p. 8.

contrast between the world of Time and the world of Space may be called the key to the understanding of Bergson's strictures upon certain scientific and philosophical theories, and to the comprehension of his own philosophy as well.

Thus most of the errors, misconceptions, and blunders in the department of philosophy arise from the transfer to the world of time of what is valid only for the world of space. For, in Bergson's view, the world of space is the sphere of the exact sciences; the world of time the sphere of philosophy.

As Time is different from Space, so the *method* of philosophy is essentially different from the method of the exact sciences. The Intelligence is the organ of exact science: Intuition is the organ of philosophy. The Intelligence can only grasp the contiguous, the discontinuous, the disconnected, the quantitative, the numerable, the measurable, the calculable, the homogeneous—in short, *matter*. The procedure of Intuition is quite different. It transports us at once into the inner nature of reality and makes us aware of its creative becoming. The Intelligence is always fixed on action, on the practical and the useful; it outlines ideas of the universe that are merely partial, and it gives us only partial knowledge. But Intuition looks further than mere practice; it contemplates things *sub specie durationis*. Intuition gives complete know-

ledge; it comprehends the heterogeneous, the qualitative and the sequent, the continuous and connected, the reciprocally permeative, the unpredictable, the contingent, freedom, life—in short, *mind*. When that knowledge which proceeds from the Intelligence presumes to regard its own results and its own methods as the only valid ones—when it seeks to make them the standard of all knowledge—then the consequence is Intellectualism in all its phases—the imperialism of the exact sciences, the empirical side of Positivism, psycho-physical parallelism, the psychology of association, determinism, mechanistic evolution, and the rest. The attempt to overthrow these modes of thought follows as a profoundly necessary consequence of Bergson's fundamental separation of the World of Time and the World of Space.[1]

Thus the confusion of the two methods—the cinematographic method that depends on the Intelligence, and the method of Intuition—had serious consequences in the consideration of the problem of *Free Will*. The whole struggle between the Determinists and their opponents implies in itself a confusion of duration and extension, of sequence and simultaneity, of quality and quantity. Both Schools

[1] In "Durée et Simultanéité," Bergson criticises Einstein's theory of Relativity from this standpoint, seeking to prove that Relativity of Time can only be understood from the aspect of the exact sciences.

are radically wrong in one point: they find a *spatial* symbol for the growth of the Self in Time, and they represent the motives as things. The inward development of the Self is conceived as a line leading to a point at which two ways stand open, and were thus apparently free to be chosen, even after the Self had already entered upon one of the two paths. Determinists and Indeterminists conceive of a *decision* as a wavering in space, whereas it really is made up of a dynamic progress, in which the Self and its motives, as real living essences, are in constant process of becoming.[1]

Bergson attacks *Determinism* with especial vigour. His principal *casus belli* is this: Determinism involves a Psychology of Association, which raises ideas and images to the status of independent existences, which float like Epicurus' atoms in empty space, which approach and join each other whenever chance brings them into the sphere of reciprocal attraction. This psychology denies the qualitative difference between consequent states of consciousness.[2] Certainly it is incontestable that a relation exists between the momentary state and every new state to which the consciousness moves on: the question is, whether the condition that explains the transition is also its cause. Bergson decides that the psychology of

[1] "Essai sur les données immédiates de la conscience," p. 140.
[2] *Ibid.*, p. 125.

association is only applicable to ideas that belong to us least of all, ideas capable of expression through words. Our " profound Self," our innermost being, that which is in us most personal, is beyond the grasp of this school of psychology. In the place of the phenomenon mirrored in my mind, the Associationist would erroneously set up the artificial reconstruction of that phenomenon ; he thus confuses the phenomenon and its explanation.[1] A psychology of this kind degrades the Self to an automaton ; it underestimates the active participation of the whole personality in the soul's becoming. And again, Determinism transfers to psychic phenomena the mechanical causation of physical phenomena, and consequently fails to appreciate the flux, the mobility, the creative becoming of the life of the soul. In the realm of Physics, the same cause always has the same effect ; in the realm of Psychology, a profound inner cause only produces its effect once, and can never repeat it in precisely the same way.[2] That which is living is incapable of being repeated and of being predicted. If we were automata, our actions might be rigidly determined ; but we are conscious beings ; we create ourselves anew every moment, and thus are beings that act with freedom. But our action is only free when it is the expression

[1] " Essai sur les données immédiates de la conscience," p. 122 *sq.*

[2] *Ibid.*, p. 153.

of our whole and profound Self. As soon as we act from mere habit, as automata (and Bergson expressly declares that most of our actions are reflex actions), we are not free. The moments when we are in full possession of ourselves are rare; and so we are seldom free. Only he can act freely who has again entered into possession of himself, who has carried himself back to pure duration. We are free whenever our actions are the expression of our whole personality, when they bear to it that indefinable likeness which is often found to exist between the artist and his work of art.[1] Thus, according to Bergson Freedom is a reality and more; it is the clearest of all observable facts.[2]

Bergson's conception of the *Comic* is, in a measure, a complement to his doctrine of free-will. He defines the comic as a mechanisation of the living.[3] What makes us laugh is a certain mechanical stiffness, a sort of automatism.[4] The opposite of the Comic is the Graceful; and Gracefulness is nothing more than the spiritualisation of matter.[5]

The Bergsonian idea of creative duration lends originality to his conception of the relation of *body and mind.* The body is to the mind just as space is to time. The spiritual is essentially time, creative duration, creative growth; the corporeal is space,

[1] "Essai," p. 132. [2] *Ibid.*, p. 169.
[3] "Le Rire," p. 39. [4] *Ibid.*, p. 17. [5] *Ibid.*, p. 30.

extension, matter. The psychic is not severed from the physical, nor is it a parallel process of the physical, nor indeed a play of cerebral mechanism. It is more correct to say that the cerebral state, *i.e.*, the physical, is the continuation and the instrument of the psychic.[1] Hence Bergson's attack on psycho-physical parallelism, *i.e.*, on the theory of the equivalence of the cerebral state and the psychical state. The great error of this theory is that it disregards the specific character of the life of mind, that it sets quality and quantity, time and space on the same level. We grant that experience shows the existence of a certain interdependence of the physical and the psychical, that for a spiritual condition there must be a certain cerebral substratum; and at every moment the brain suggests the motive mechanism of the state of consciousness. It does not, however, follow that both conditions are equivalent. A number of mechanical devices may be necessary for the working of a machine; but nobody would assert that they are equivalent to the whole machine. Memory is different from matter, not merely in degree, but in essence.[2] Memory is not a product of the state of the brain; it is the state of the brain that propagates the memory.[3] In the same way, Dreams are the materialisation of something im-

[1] "Matière et Mémoire," p. 260.
[2] *Ibid.*, p. 262 *sq.* [3] *Ibid.*, p. 269.

material, *i.e.*, the memory, by virtue of sensations that reach us from without. If thus the consciousness is independent of the body, the immortality of the soul is not merely probable but certain.[1]

The confusion of the World of Space and the World of Time lies, in Bergson's opinion, at the root of every wrong interpretation of life, of Intellectualist as well as of Mechanistic Evolution. Nowhere does the intelligence prove to be so inadequate as in the attempt to comprehend the living after the analogy of that which has not life. It is clear that the intelligence has been created under definite circumstances by life itself, to function upon certain things; the intelligence is nothing but an aspect of life, and can therefore never comprehend life itself. Mechanism and Finalism Bergson calls "ready-made suits" which we endeavour to force upon living happenings. The radical error of both doctrines is the assumption that all is "given." Spencer's Evolution is subjected by Bergson to the severest criticism, since it is destitute of any idea of growth or of evolution in the sense of creative duration. The master-trick of the Spencerian method is that it reconstitutes Evolution with fragments of the evolved.[2]

In the sphere of Biology Bergson's chief philoso-

[1] "Énergie spirituelle."

[2] "Évolution créatrice," p. 393; *ibid.*, p. 288 *sq.*

phical discovery is his doctrine of the "élan vital." In this doctrine, as in his general outlook on the universe, there is a strong tinge of mysticism. Bergson imagines the creation of life after the analogy of artistic creation. Everything proceeds, he says, as if some nature as yet unclear and undefined—be it named the nature of man or of superman—had endeavoured to realise itself, but had lost a considerable share of its own self on the way. These losses are represented by the rest of animated nature, and to a certain degree, by the plant world. The undefined existence, which endeavours to manifest in itself the creative urge, is called by Bergson in another place consciousness or superconsciousness (conscience or supraconscience). This is only expressed where creation is possible. It becomes dormant when life is condemned to mere automatism: it is aroused as soon as there is presented the possibility of a Choice. This consciousness attains its highest manifestation in mankind. Bergson discovers the best proof of the common nature of the inward life-force in the fact that almost identical mechanisms (for example, the eye) have come into being through different means and along diverging evolutionary paths; a fact not to be explained by Darwinism, nor by Lamarckism, nor by Hugo de Vries' theory of mutation.

So, according to Bergson, the profound essence of

Reality is the Spirit. And Bergson's doctrine of the Spirit is not merely human; it is planetary, it is even cosmic, for spirituality is the bond which unites all beings and enables them to beat down every obstacle, perhaps even death itself.[1] The life of vegetation, the life of instinct, and the life of reason are not three grades of one single tendency, which is evolving; they are rather to be looked upon as three divergent tendencies of one activity which has split off as it grew. The difference between them is not merely a difference in intensity, but a difference in essence.[2] The faculty which is most of all peculiar to man is Intelligence, that is, the faculty of *making* things. So, according to Bergson, man deserves to be called *Homo faber* rather than *Homo sapiens*.[3] *Instinct*, on the other hand, has been moulded after life itself. Could the consciousness that is latent in Instinct be aroused, it would reveal to us life's deepest secrets. Bergson believes in the possibility of this—that Instinct, which is really sympathy, may become really disinterested and attain consciousness of itself. In man this happens through Intuition.[4] Thus Intuition leads us to the innermost places of life. Intuition is the organ of Philosophy.

It is hardly necessary to emphasise the fact that Bergson's Spiritual Positivism is essentially of an

[1] "Évolution créatrice," p. 293 *sq.* [2] *Ibid.*, p. 146 *sq.*
[3] *Ibid.*, p. 151. [4] *Ibid.*, p. 192 *sq.*

ethico-religious type. As Bergson, however, has himself not yet dealt with the problems of practical philosophy on an extensive scale, we must refrain from any hypothetical treatment of this side of his teaching.

Bergsonians

There is no Bergsonian School in France in the sense in which we speak, say, of a Marburg School in Germany. The infrequent "Bergsonians" are not so much immediate disciples of Bergson: they have attached themselves to him. There is no common bond of union amongst them.

Édouard Le Roy (1870–)

It is clear beyond all doubt that the most important adherent of Bergsonianism in France is Édouard Le Roy. But, over and above Bergson, he has been influenced to a high degree by Poincaré, Duhem, Boutroux, Blondel, Laberthonnière, and Loisy. On one side he belongs to the Critico-Epistemological school, on the other to religious Modernism. In this section we shall limit ourselves to giving an outline of his attitude towards exact science; he expressly declares, however, that he would welcome a spiritual Positivism in the place of Positivism on its empiric side.

Amongst Le Roy's works we have to consider: "Science et Philosophie" in the "Revue de Méta-

physique et de Morale," 1899–1900; "La science positive et les philosophies de la liberté," in the "Revue de Métaphysique," 1900; "Un Positivisme nouveau," in the "Revue de Métaphysique," 1901.

What differentiates Le Roy from other philosophers of the Critical school is, that he extends the idea of conventionalism and instrumentalism over all the laws of science and its facts, and denies the legitimacy of precise scientific knowledge as such. He distinguishes three stages or kinds in the knowledge of given reality: (1) the knowledge of common sense; (2) positive and exact scientific knowledge; (3) Philosophy.

(1) The teachings of *common sense* are inadequate. They are too poor and too crude. Pressed into service for practical aims, they aim at two purposes that go well together; the facility of individual action and discursive thinking, the possibility of the social life which depends on the exchange of ideas. Hence the rough-and-ready pigeonholing, which misrepresents reality, crushes the fragile and delicate structure of the facts (faits) and leads away the understanding from the refined anxieties of disinterested speculation. And above all this ordinary intelligence is ignorant of the fact that it involves the presumption of a mental attitude which precedes its own activity. And, lastly, such

ordinary knowledge is lacking in method; it grows haphazard like a wild plant.[1]

(2) *Positive science* is an immediate continuation of *common sense*. Its work is with the concentration and selection of the material from which rational science is to construct the edifice. It already admits of a certain rudimentary organisation. But the scientist forgets only too often that he himself is the creator of the order and determinism which he professes to find in things.[2] To lay adequate emphasis on the part played by the mind's free activity in the experimental fixation of truth, Le Roy examines critically scientific *events* (faits), *laws*, and *theories*. He establishes the fact that the processes are cut out by the mind from the shapeless stuff afforded by the data, with the sole view of making possible a rigid method of expression. Every process is the result of co-operation between Nature and Mind. There is indeed in the processes a mysterious residue of objectivity, but science, wholly and solely bent on the dismemberment (morcelage) of data, is not in a position to see the true "stuff" that underlies all the processes.[3] Philosophy alone can reveal this "stuff." Laws of Nature, too, are the product of a dismemberment and dissolution of the world-order. Every law is a creation of the mind,

[1] "Revue de Métaphysique," 1899, pp. 504–6.
[2] *Ibid.*, p. 513 *sq.* [3] *Ibid.*, p. 518.

a symbol and product of our ability incessantly to vary the angle from which we contemplate continuity, in the universe.[1] Laws are consequences of our utterances in language, which give expression to these laws without doing the least towards revealing the nature of things. In this consists the whole objectivity and necessity of laws of nature. There is no question of any objectivity included in the processes themselves. In the same way, it is the business of a theory to frame a general scheme of ideas which can be applied to a category of laws. The theory, too, is a symbol and consequently merely provisional. The result alone determines the worth of this or that hypothesis. The goal of experimental science is the progressive rationalisation of the real.[2]

(3) *Philosophy* is not, as affirmed by Comte, the speciality of generalisation; it is the spirit of criticism and synthesis, in so far as that spirit is directed to an intuition referred to itself alone and free from all external dependence. Theory of Knowledge, Theory of Being, Theory of Action—such is the programme and the realm of science.[3] Positive science, in its investigations, puts on one side the increasing becoming of the life of the mind; to comprehend this progress and to constitute the last and highest unity is the task of Philosophy. And the real name for

[1] "Revue de Métaphysique," 1899, p. 520.
[2] *Ibid.*, p. 534. [3] *Ibid.*, p. 715.

Philosophy should be the life of the spirit of man.[1]

Joseph Wilbois is a physicist; and his criticism of Positivism on its empirical side is based essentially on Physics. His thought is influenced by Boutroux, Bergson, Duhem, Le Roy, and Poincaré. Among his works our consideration may be directed to his "La méthode des sciences physiques," in the "Revue de Métaphysique," 1899; "L'esprit positif," in the "Revue de Métaphysique," 1901. Wilbois is anxious to prove that positive science pursues a purely symbolic-practical aim, and as a consequence is not in a position to give a knowledge of true reality. In this respect he is in advance of Édouard Le Roy. The so-called "Laws" of Physics are in no wise the expression of a law of things in themselves; they are rather the expression of our own weakness; they are artificial.[2] In them we discover, a considerable amount of the fortuitous, *i.e.*, the caprice of the physicist. All the identities that occur in physics are approximations.[3] In the physical world there is no Necessity apparent. We choose the law of the Conservation of Energy as well as the law of Inertia because these laws permit us through their great simplicity to act in the most immediate and ordinary way. But we do not wish merely to act; we wish to

[1] "Revue de Métaphysique," 1900, p. 65.
[2] *Ibid.*, p. 295. [3] *Ibid.*, p. 292.

know as well. Science cannot satisfy this desire.[1] Nor can science give an answer to final questions such as whence man came, and whither he goes. That is exactly the work of Metaphysics. Wilbois also professes a new Positivism, which he very clearly distinguishes from that of Comte. He defines the positive spirit as " l'esprit de respect des faits," " un esprit de relativisme," and " un esprit de vie." Side by side with a positive science there is room for a positive Metaphysics.[2]

In his work " Devoir et Durée " (Paris, Alcan, 1912), Wilbois continues the attack on Empiric Positivism; his point of view is here essentially *ethico-sociological* and his arguments are based on Bergson. While fully acknowledging Durkheim's great services to Sociology—that is to say, so far as Durkheim drew attention to the specific character of the social process—Wilbois complains that Sociological determinism turns Society into a mere conventional symbol. Freedom is the root of morality, and cannot be destroyed by Determinism; for Determinism itself is a product of Freedom, *i.e.*, of Mind.[3] To apply physical Determinism to Sociology is not practicable. Sociology must be complemented by metasociology. And metasociology leads to morality and to religion.[4]

[1] " Revue de Métaphysique, etc.," p. 317. [2] *Ibid.*, p. 159.
[3] " Devoir et Durée," p. 8 *sq.* [4] *Ibid.*, p. 404.

Georges Sorel (1847–1922)

Georges Sorel, the well-known philosopher of Syndicalism and interpreter of Marxism, mathematician and engineer, may also be called—*cum grano salis*—a follower of Bergson. While, under the dominant influence of Poincaré and the other representatives of the Critico-Epistemological School, he combats Empiric Positivism with the utmost vigour in his setting of Syndicalism on an anti-intellectual and intuitionist basis, in his working out of the general strike and the "violence myth" he rests essentially on *Marx* and *Bergson*.

For a knowledge of his criticism of exact science his essay on "Les préoccupations métaphysiques des physiciens modernes" [1] must be taken into account. Exact science, and especially Physics, so far from being a product of mere experience, *i.e.*, a passive copy of nature, is in Sorel's opinion saturated with hypotheses; nay, it is based on Metaphysics.[2] As to the so-called Laws of Nature, we learn from the history of exact science that our confidence in the certitude of these laws is dependent on the nature of the hypotheses we construct when face to face with the objects.[3] Sorel, like Poincaré, asserts that there are no *necessary* hypotheses. As to Determinism, Sorel says: "Le déterminisme manque dans nos machines;

[1] "Cahiers de la quinzaine," VIII, 16.
[2] *Ibid.*, pp. 35–6. [3] *Ibid.*, p. 43.

à plus forte raison doit-il manquer dans les phénomènes naturels." [1]

Revolutionary Syndicalism, as Sorel endeavours to establish it in " Réflexions sur la violence," also bears witness in some measure to the influence of the Bergsonian idea of Creative Evolution. Sorel decisively refuses to accept any intellectualist conception of politico-social life. It is not precise and lucid ideas, not calculation and sagacity—it is intuitions, instincts, non-rational and non-conscious elements, myths, violence, rebellion, revolution that are truly inventive, productive, creative, and lead to progress in the sphere of politics and society. And so let us do away with ideology. In pointing to the General strike and the Marxian " révolution catastrophique " as indispensable " myths," Sorel is thinking of the " images " that play such a part in Bergson's psychology.[2] Sorel opposes the myth to the utopia, which is nothing more than a product of the intellect. He considers he is still a loyal Bergsonian when he associates himself with Marx in ascribing far greater power for the remoulding of the world to economic conditions than to mere ideas. And similarly, the catastrophic conception of Socialism is quite in accordance with Bergson's comprehension of the movement as " un tout indivisé." [3] Socialism is,

[1] " Cahiers de la quinzaine," VIII, p. 72.
[2] " Réflexions sur la violence," p. 33. [3] *Ibid.*, p. 154.

according to Sorel, bound to be an obscure matter, for it has to do with production, and production is the most mysterious thing in human activity.[1]

So as not to overstep the limits of the present sketch, we have to make but a brief reference to Bergson's other followers.

Bazaillas' books, "La vie personnelle," 1905, and "Musique et Inconscience," were certainly affected by Bergson's influence. Thus Bazaillas opposes to the intellect (*i.e.*, the function of the homogeneous, the similar, the unchangeable), *consciousness* which he identifies with the inward becoming, with the continuous spontaneity of our states, with the changing rhythm to which in each of us our developing activity beats time.[2] The life of the personality he conceives as a progress towards spirituality. Bazaillas' Bergsonism is also manifest in his conception of Music as an introduction to the study of the Unconscious, as a world in which imagination and feeling play the leading parts.[3]

The "Leçons de Psychologie," 1911, by *Desiré Roustan*, bear witness to the influence of both Biran and Bergson. He draws a sharp line between the processes of body and soul. He challenges the epiphenomenal conception of the consciousness,

[1] "Réflexions sur la violence," p. 201.
[2] "La vie personnelle," p. 15.
[3] "Musique et Inconscience," p. 320.

psycho-physical parallelism, and the empiristic idea of attention (*e.g.*, that of Condillac). And he holds that Language is a very inadequate instrument for the expression of thoughts that are *felt.*

Bergson's influence is also to be discerned in the work of the psychiatrist *Charles Blondel*, "La conscience morbide, Essai de psycho-pathologie générale," 1914. In agreement with Bergson Blondel believes that normal conscious life, at the stage in which we experience it, is peculiar to the species rather than to the individual; and thus insanity consists fundamentally of a failure on the part of the individual, either definitively or for the moment, to adapt himself to his social group or to humanity as a whole.

Segond in his book "L'intuition bergsonienne," 1913, avows himself a Bergsonian with limitations; he endeavours to characterise the antithetical nature of the Bergsonian philosophy as merely apparent. He calls Bergsonism "pragmatisme de la spiritualité" or "integral evolutionism," and so forth.

The two works of *Frank Grandjean*, of Geneva, "Une Révolution dans la philosophie" and "La Raison et la Vue," are completely under the influence of Bergson. In the former the author pronounces an eloquent appreciation of the master; in the second, he carries to an extreme point the doctrine of non-rationalism and declares war to the knife on reason.

Chide in his work " Le mobilisme moderne," 1908, stands for a thoroughgoing *mobility* and *change*. He attacks the idea of the Unity of the Cosmos, and predicts an advance of " illogisme."

Thibaudet, the distinguished historian of literature, professes in his work, " Le Bergsonisme," 1923, that his literary criticism is essentially inspired by Bergson, in spite of his strictures on Bergson's Anti-intellectualism.

The Belgian philosopher, *Georges Dwelshauvers*, does not start from Bergson's teaching. In fact, he criticises it in many essential points. He cannot accept Bergson's conception of the psychic process as exclusively qualitative. He professes a broad rationalism and accuses Bergson of having invented an exaggerated intellectualism so as to attack his opponents' views. And further, Dwelshauvers challenges the applicability of that conception of Time which Bergson attributes to Physics, that is, the identification of physical Time with Space. But in spite of all these misgivings, Dwelshauvers is at one with Bergson in essential points. Thus he recognises the great service Bergson has performed when he subjected to a devastating criticism the activities of those over-zealous partisans of physiological psychology who would reduce consciousness to quantitatively measurable movements of the brain.[1] Dwel-

[1] " La psychologie française contemporaine," p. 217 *sq.*

shauvers' synthetic conception of the psychic life, as set forth in his works, " La synthèse mentale," 1909, and " L'Inconscient, " 1916, is both Bergsonian and Biranian.

Maurice Pradines is a pupil of Bergson; but in his two-volume work " Critique des conditions de l'action " he feels it his duty to go further than his master. He especially desires to lay aside the Bergsonian antithesis between action and knowledge, and to work out the idea that every thought is an act. He accepts the fundamental thesis of Pragmatism, especially as set forth by the Epistemological School, according to which every forward step in modern speculative thought confirms the idea that knowledge creates its object in accordance with utility in action and that knowledge can only exist when it is free.

Henri Delacroix (1873–)

Although Delacroix' philosophy does not emanate from Bergson, it is permissible in his case to speak with limitations of a certain Bergsonism, and at all events of an endeavour to overthrow the psychology that has its origin in Positivism.

This applies in the first instance to his interpretation of Mysticism as contained in his doctoral thesis " Essai sur le mysticisme spéculatif en Allemagne au XIVe siècle " (Paris, 1900), and in

" Études d'histoire et de psychologie du mysticisme. Les grands mystiques chrétiens " (1908). Thus Delacroix points to Intuition as the core of Mysticism; the last assertion of Mysticism is, in the main, the identity of intuition and action: Thought creates what it contemplates and contemplates what it creates: the mind perceives itself in the action through which it asserts itself.[1] Or to the statement that Mysticism is " une revanche de l'intuition contre la connaissance discursive." [2]

In " La Religion et la Foi " Delacroix stands for an essentially anti-intellectualist conception of the origin and nature of religion; *e.g.*, when he says that " Mysticism is at the beginning and the end of religion."[3] Certainly, intuitions without ideas are blind, and in the same way myth and ritual must not be divorced from each other. But in respect of religion Feeling and Intuition are the starting-point.[4] It is also important to remark that in contrast to Sociology, which explains everything through society, Delacroix holds that religion is conditioned to a high degree by man's *spiritual* nature.[5]

As an interesting contribution to the struggle for a spiritualistic Positivism and Dynamism, we may finally notice Delacroix' book on the psychology of

[1] " Essai," p. 15. [2] " Etudes," p. viii.
[3] " La Religion et la Foi," p. 428.
[4] *Ibid.*, p. 423. [5] *Ibid.*, p. 418.

language, "Le Langage et la Pensée," 1924. Language, like science, is in Delacroix' opinion a product of the mind's creative activity.[1] A language is one of the mental instruments which transform the chaotic world of sensations into a world of objects and ideas. Language is not the mere product of the understanding; it is a work of the whole man.

Anti-Bergsonians

Although Bergson has many opponents among French philosophers, up to the present comparatively few books have appeared in definite refutation of his teachings.

The first note of alarm was sounded in 1898 by *B. Jacob* in an article "La philosophie d'hier et celle d'aujourd'hui," published in the "Revue de Métaphysique et de Morale." Jacob was an out-and-out rationalist and discerned a new peril in this new emergence of a non-rationalistic philosophy, as the originator and chief prophet of which he designated Bergson.

In 1912 there appeared, under the title "Le Bergsonisme ou une philosophie de la Mobilité," a pamphlet by *Julien Benda* which attracted considerable attention. In this pamphlet Bergsonianism was attacked with great vigour from a stand-

[1] "Le Langage et la Pensée," p. 577.

point essentially Renouvierian. Benda collects and scrutinises all the ambiguities and contradictions involved in certain fundamental ideas of the Bergsonian doctrine, especially in the doctrine of Intuition. As far as the Bergsonian philosophy claims to attain knowledge of becoming (le se faisant) it explains nothing; its explanation is limited to what has become (le tout fait). Bergson is a mystic; he brings no new teaching. And coherent thought, in him, is out of the question.

René Berthelot, the youngest son of the distinguished chemist, Marcelin Berthelot, is the most penetrating critic of Bergson in France. In his book "Le pragmatisme de Bergson" he passes judgment on Bergsonism from the rationalistic Hegelian point of view. Berthelot undertakes a sort of chemical analysis of Bergsonism, demonstrating the extent to which the Bergsonian main Theses are found in his predecessors, Plotinus, Berkeley, Ravaisson, Schelling, Spencer, and others. Berthelot sees in Bergson a half-and-half Pragmatism. He admits the importance of Bergson's struggle with the psychology of association and with exaggerated intellectualism, but, before Bergson, Hegel had already put forward a similar conception of Spirit.[1] True spiritual activism is essentially above time and

[1] "Le pragmatisme de Bergson," p. 346.

the individual; the Bergsonian activism is not very different from certain material changes. And further, Bergson's idea of the "immediate datum," "absolute reality," and freedom are ambiguous and contradictory.[1]

Typical in the highest degree of the attitude of the Catholic Church to Bergsonianism is the criticism of Bergson contained in "La philosophie bergsonienne. Études critiques" (Paris, 1914), by the leader of Neothomism in France, *Jacques Maritain*. Maritain sees in the Bergsonian philosophy a failure to recognise the most sacred principles of Thomism, and he thus regards it as the fountain-head of all modernist errors. Certainly, Maritain appreciates Bergson as a doughty comrade in his criticism of the manifold divagations of empiric Positivism and Comtian Relativism. But Bergson's arch-sin against the spirit of Thomism is his anti-intellectualism and his intuitionism,[2] and his misconception of the Aristotelian-Thomistic contrast between Potentiality and Actuality, since he exalts Change to be the very Substance of things.[3] As a consequence of this, there is no room for God in the Bergsonian philosophy, for as soon as you do away with being in things you remove at the same time that which makes

[1] "Le pragmatisme de Bergson," pp. 333, 340.
[2] "La philosophie bergsonienne," p. 37. [3] *Ibid.*, p. 422.

them like unto God. In short, Bergsonianism is an atheistic pantheism and leads directly to spiritual nihilism in philosophy, to modernism and pragmatism in religion.[1]

We may refer in this connection to the rapid growth of the Neothomistic movement in the last few years in France. The centre of this tendency is the Catholic Institute in Paris. At the Sorbonne, *Étienne Gilson* is a zealous historian of Thomism. Three years ago a Neothomist Association was founded in Paris, where appear also two Thomist reviews: the "Revue Thomiste" and the "Revue de Philosophie."

Materials for the History of Philosophy

We may apply our division into three main groups of tendency to the History of Philosophy as well.

The works that belong to the Empiric-Positivist main current are comparatively few in number. We might select for mention *Lévy-Bruhl's* exhaustive work on "La philosophie d'Auguste Comte" and his edition of the correspondence between Comte and Mill; and *Georges Dumas'* "Psychologie des deux messies positivistes, Saint-Simon et A. Comte." Littré, Taine, Renan, Ribot,

[1] "La philosophie bergsonienne," p. 452.

Durkheim, Lévy-Bruhl and other members of this group have not yet been so fully treated.

The historical studies that belong to the second main tendency are more numerous and thorough. *Kant*, as would be expected, has the first place. And the historical works are from the pens of the most prominent workers in the History of Philosophy during the immediate past. Thus *Émile Boutroux*, " Kant " in the " Grande Encyclopédie " ; *Victor Delbos*, " La Philosophie pratique de Kant " ; *Victor Basch*, " L'esthétique de Kant " ; *Th. Ruyssen*, " Kant," etc. And other thinkers of the second main tendency have also been more or less exhaustively dealt with ; *e.g.* Renouvier, Cournot, Poincaré, etc. Parodi's work before mentioned, " La philosophie contemporaine en France," also breathes the spirit of this second main tendency.

Most numerous are the historical writings that can be ascribed to the third main group. This holds good, for example, of the monographs that have been devoted to individual Greek philosophers. Among the authors of these monographs may be mentioned : Fouillée, C. Piat, Robin, Charles Werner, Émile Boutroux. Of the philosophers of the Middle Ages, Thomas Aquinas (by Sertillanges, Maritain, Gilson, and others) and Maimonides (by L.-G. Lévy) have been treated with special detail. It would be expected that the majority of the

historical works would be devoted to the new era. We select for mention: on Descartes, the works of Hamelin, Gilson, Hannequin, Cochin, etc.; on Pascal: Boutroux, Brunschvicg, Strowski; on Spinoza: Delbos, Brunschvicg, Couchoud; on Leibnitz: Baruzi, Couturat; on Malebranche: Ollé-Laprune; on Biran: Tisserand; on the philosophy of the Nineteenth Century in France: Ravaisson; on Fichte: Xavier Léon; on Schelling: Bréhier; on Schopenhauer: Ribot; on Nietzsche: Lichtenberger, Andler.

The Teaching of Philosophy

In 1907 *Alfred Binet*, the psychologist, set on foot an inquiry as to the development of the teaching of philosophy in intermediate schools, which is still of value, in spite of certain limitations.[1] At all events the result of this appeal for information confirms to a high degree the attempt at grouping the tendencies of present-day French philosophy which we have undertaken in the present work. In spite of apparent chaos, Binet established the existence of three main systems or categories which have most currency in philosophic circles. Under the first system might be numbered those teachers who are almost exclusively dominated by the tend-

[1] Cp. "Année Psychologique," 1908, and "Bulletin de la Société Française de Philosophie," 1907.

ency towards the Scientific, who incline either towards Positivism, Evolutionism, or Empiricism. In general this system would correspond to our first main tendency. As the distinctive mark of the second main system Binet proposes a preference for classical Rationalism, partly in the direction of Kantian Relativism and Criticism, partly in the direction of Positivism. This system corresponds to our second main system. In the third group, Binet includes those teachers who pay homage to Idealism or Spiritualism—and in this the great popularity of Bergsonism is at once evident. This system corresponds to our third main tendency. Binet gives the following percentages for the main groups: I, 37%; II, 25%; III, 38%. Binet, who was decidedly Empiricist-Positivist in his views, predicted at the end of the inquiry that in future, both in the case of teachers and pupils, the interest in idealistic Metaphysics would gradually fall off. We might doubt whether this prophecy has been or will be realised.

The Religious Movement

A consideration of the religious movement in France finally allows us to speak of an ardent desire for *inwardness* and, at the same time, for the availability of a metaphysical-spiritual Positivism. This holds good to some extent of certain reform tend-

encies within the Jewish and Protestant communions. But, as Catholicism is the most widespread and typical of French religions, we must confine ourselves to a brief characterisation of that tendency, which since the famous encyclical "Pascendi dominici gregis" (Sept. 8, 1907) has been known under the name of Modernism. And we are also influenced by this reason: it is in France of all countries that Catholic Modernism finds its greatest support in philosophic assumptions, and is most of all inspired by them.[1]

The Modernist movement displays no such coherent character as the above-mentioned Encyclical might lead us to believe. There *is* no Modernist system. Modernism is not a School, nor is it a sect: it is a movement which owes its existence to the coincidence of various causes quite independent of one other: and their sole common feature is the effort to adapt Catholicism to modern life. It is sought to make Religion into a real and living thing which can change men's minds and

[1] Out of all the plentiful literature of this movement we would mention: *Maurice Blondel*, "L'Action," 1893, "Histoire et Dogme"; *Bureau*, "La crise morale des temps nouveaux"; *Laberthonnière*, "Essais de philosophie religieuse"; *Ed. Le Roy*, "Dogme et Critique," "Essai sur la notion du miracle," "Comment se pose le problème de Dieu"; *Alfred Loisy*, "L'Évangile et L'Église," "Autour d'un petit livre"; *Reviews:* "Annales de Philosophie chrétienne" founded and edited by Laberthonnière (has ceased to appear); "La Quinzaine" (ditto).

hearts. The movement has a twofold origin: it is historico-exegetical and philosophic. Of the historico-exegetical tendency the leading representative is the Abbé *Alfred Loisy*, at one time Professor at the Catholic Institute in Paris, who was excommunicated from the Catholic Church during the Papacy of Pius XI. We consider it here both convenient and necessary to refer to the leaders on the *philosophical* side of the movement.

The father of Modernism in its philosophical aspect is *Ollé-Laprune* (1839–1898). What is now called the "Method of Immanence" and "Pragmatism" in the religious sense is implicitly contained in his conception of the relation of *Nature and Grace*, and, on the other side, of *Moral Certitude*. Ollé-Laprune expresses his views on the latter subject in all his writings; with most detail in his chief work, "La certitude morale," Paris, 1880. He attacks Fideism and Intellectualism alike. In his judgment, Moral Certitude is not a matter of mere intellect nor of mere belief; it is a concern of the whole man. To *know* is to comprehend the phenomena and the true essence of things, apart from the artifices of reflection. Moral and religious truths are at once the objects of knowledge and the objects of belief. To make them our own a moral action is necessary. But the complete attainment of moral certitude is a gift of God. The glory of

man is this, that as a true and real being he may become a cause through his own *act*, although that act proceeds from and is subject to something higher than himself. Through Adam's sin man has *lost* the redeeming grace of God. Through his own guilt man has been *deprived* of a thing which in other respects did not belong to him as his own. Man is utterly unable to enter into possession of supernatural life by his own unaided power. In opposition, however, to Luther, Calvin, and the Jansenists, Ollé-Laprune does not regard human reason and human will as incompetent, but as inadequate. Grace is not to supersede Nature, but merely to make her complete. This gives *redemption* its meaning. Through the redeeming, liberating, restoring Grace which the Saviour has earned for us, we receive the gift of Grace again, and this second state of man is glorious. The God-Man is a miracle that transcends all. Grace is indeed an undeserved gift: but it is not free to us to repudiate the gift, for we are created unto eternal life. God, who created us without ourselves, will not save us without ourselves. *We must acquire Grace.*

Maurice Blondel (1860–)

The merit of *Maurice Blondel*, the originator of the *Method of Immanence* and the creator of religious

Pragmatism, is this, that he gave a new extension and a new profundity to the thought of Ollé-Laprune. His work " L'Action " undoubtedly provides the most thorough philosophic basis for Modernism, and is at the same time one of the most important contributions to the struggle for a Metaphysico-Spiritual Positivism.

Blondel, like Ollé-Laprune, stands on firm Catholic ground, and regards Pascal as his foremost spiritual ancestor. He also is a foe of Intellectualism and of Fideism. That is to say, he challenges the self-sufficiency of exact scientific knowledge. He demonstrates that the knowledge of the positive sciences is a symbolic knowledge. True knowledge is to comprehend phenomena and the true nature of things, apart from the artifices of reflection. Moral certainty is attained, not by intellect alone, not by belief alone: it is an act of the whole man. What cannot be known —above all, what cannot be understood—can be *done* and translated into practice. Mere scientific knowledge cannot lead us to action, since it does not permeate our whole being. Every action that proceeds from a thought of faith (pensée de foi) begins the birth of a new man, since it makes God reveal himself in Man. For us Being and Life are not in that which ought to be thought or

believed or done in a practical way, but in that which is actually done. In every action is contained an act of faith.

Like Ollé-Laprune, however, Blondel is far from believing in the self-sufficiency of man. What a man does is not a matter of Man himself or of Nature; it is a matter of the grace of God. The great difficulty of treading the narrow path, which leads to life, is to bring these two different aspects into unison; we must do everything that we can as if we were thrown on ourselves alone; but at the same time we must comprehend that whatever we do, however necessary it may be, is still inadequate. After we have done everything as if we expected nothing from God, we must still expect everything from God, as if we had done nothing of ourselves. The strange thing about the idea of the supernatural is this, it is at the same time absolutely impossible and absolutely necessary for man. What a man does is more important than the man himself. By willing with the whole heart all that we will, we put the nature and the act of God into us. True Infinity can only be immanent in action. It is obvious that Blondel's Immanence does not exclude Transcendence—nay, it implies it. This can be seen from the following characteristic passage: "The human sap is the food of the supernatural life; but it is

just this life that becomes fruitful and blooms within us to bring forth perfect works at last!" [1]

The clearest presentation of Blondel's Method of Immanence is to be found in his "Lettre sur les exigences de la pensée contemporaine en matière d'apologétique," 1896. The Method of Immanence regards the supernatural not as real in its historical form, not as merely possible as an arbitrary hypothesis, not as something conformable to Nature and adaptable to it, in which case it would be merely nature at its highest development: but as *indispensable* and at the same time *unattainable* to mere man. If our nature is not at home in the supernatural, the supernatural is at home in our nature. The real, effective synthesis of nature and the supernatural can happen only in actual practice and by means of Grace.

By introducing the Method of Immanence Blondel does not merely seek to do justice to the immanent character of modern philosophy, which teaches that nothing can enter a man which does not proceed from him: he also attacks the Scholastic philosophy, as far as it tends to exalt theory above practice, and as far as it looks upon Theological rationalism as the sum-total of philosophy. Blondel's quarrel with Scholasticism is not the consequence of Fideism or Sentimentalism: it is rather the

[1] Cp. with the above: "L'Action," pp. 388–410.

accompaniment of his *Activism*. Blondel is everywhere zealous to show that the supernatural does not come from without, whether through the external senses or through the understanding, but that it comes through the act of the whole man. To employ an expression of Eucken, the supernatural for Blondel is at the same time *fact* and *problem*. This is also true of *revelation*. The latter does not merely come from without as an empiric fact. Miracles are only miraculous for the eyes of such as are ready to see the working of the Divine in the commonest events and actions. Nature is so broad, so manifold, that she is everywhere ambiguous: and when she meets the soul, she gives back the echo we hoped to hear from her. Our search for God is itself a gift. Revelation without a medium is impossible. In order that life may be obtained and guarded and maintained, life must have a *Saviour*. It is through Jesus Christ that we obtain this: but on the other hand it must be said that Christ is human through and through; he is literally the Son of Man. Christ is at the same time concrete, and universal, to an extraordinary degree. In him are united the human and the divine, even as they are united in ourselves.

Far from combating *Tradition*, Blondel endeavours to show that it is necessary. In Tradition he sees a highly individual principle, whose task it is to

unite History and Dogma. But Tradition is for him something more than a mere oral handing-on of historical facts, accepted truths, communicated doctrines, and ancient dogmas. He conceives Tradition as a force at the same time conservative and progressive which discovers and formulates truths on which the Past has lived without consciously having defined them. Tradition is certainly based on what is fixed in writing; at the same time it relies on an experience which is continually active. This conservative and preservative force can instruct and initiate. It always has something new to tell, since it converts that which is implicitly felt into that which becomes explicitly known.

In the number of the theologians who supported Blondel in his fight against Scholastic Intellectualism and his struggle for a Method of Immanence the most distinguished is undoubtedly the Abbé *L. Laberthonnière* (1861–), editor of the "Annales de Philosophie chrétienne." As energetically as Blondel Laberthonnière points out that the act of the whole man is indispensable for the coming into existence of true faith. Truth, he says, only becomes our own—enlightens and inspires us—only in the degree we seek with our whole being to create Truth in ourselves. This he calls *Moral Dogmatism* and this is the preliminary assumption for the

Method of Immanence. Only such truth is living and effective as permeates our entire being. If truth came to man only from without, apart from proceeding from within by means of life, then no progress would be possible, and no movement would ensue. Laberthonnière emphasises with even greater precision than Blondel the impossibility of being at the same time a Christian and an Intellectualist. Religious, *i.e.*, supernatural truth is not provable, for proof is the eliciting of a truth from another truth. To endeavour to deduce supernatural from natural truth, as the properties of one mathematical idea are deduced from another, would make the supernatural impossible. The supernatural is, according to its very principle, free, and differs from the natural *non solum principio sed objecto*. To believe, to possess faith, is to possess supernatural truth in such a way that it is introduced into our own life, that we may *live* supernaturally. To arrive at faith no knowledge of supernatural truth is necessary. If to think, in a certain sense, means a universal quality, to possess faith is an individual quality, for to believe is to live, and none can live in the place of another. Speculation is a matter of the mere intellect; faith is a matter of the will. To have faith, living and perfect faith, is to possess God. But we can only possess God by giving our-

selves wholly to Him, and we can only give ourselves wholly to Him because He gives Himself to us. Belief is consequently the coincidence of two kinds of *love* and not a combination of two ideas. It is not an abstract inference; it is a living act. God comes to us, not from without, but from within. It is not so much that we are in Him as that He is in us. If revealed truth were not present in us in a supernatural manner as a guiding idea, it could never become our truth and we could never bring it into our own lives, since it would correspond to no need on our part. Revelation from without, apart from Grace from within, would be meaningless for us. God has done His part; we must nevertheless do ours. It is not enough for God to speak to us inwardly; we must also hear His voice within us. The sun shines for the whole world; yet we must open our eyes that they may receive the light of the sun.

Le Roy, in carrying Blondel's Method of Immanence and Pragmatism still further, leans especially on Bergson. He too is a foe of Intellectualism. Hence he tries to show how scanty and how unfruitful are proofs for the existence of God. Le Roy considers it a presumption to try to comprehend God. For the man of to-day Logic is no longer the criterion of truth. Not one of our ideas can

be applied to God. God is and remains incomparable and incommensurable with all the beings we know. To affirm God is to affirm a concrete freedom, an Absolute that transcends all categories. To try to prove God is equivalent to denying Him. If, in general terms, God can be known at all, knowledge of Him is only possible through personal experience, *i.e.*, through an immanent experience, contained in the actuality of life itself. We know God through love that leads us to Him, in proportion as we grow more like Him. Dogma also has above all a practical meaning. It is more than anything else the framework for a rule of practical conduct. Dogmatic formulæ are certainly beyond comprehension, if we look in them for a positive determination of truth. It is our right and our duty, not blindly to believe in dogmas; we should endeavour to understand and to examine them critically. Thought as applied to dogma is something more than an intellectual dialectic; it is a matter of *realised experience*. But religious experience is not a concern of the subject alone. In our search for God we are not left to ourselves. God leads us to Himself through Prayer. Our life is a continuous new creation. Transcendence and Immanence are not contradictories; they correspond to two different moments in duration: the essence of Immanence

lies in what has actually become, that of Transcendence lies in the power of becoming. Belief in *Miracles*, like belief in God, is according to Le Roy a matter of inward experience. Apart from belief there can be no miracle. Through miracles are revealed in belief the sovereign power of the Spirit and the supremacy of the spiritual over the material. Le Roy, with Blondel and Laberthonnière, says expressly that he stands on Catholic ground. Like Loisy, he assumes that God is in Christ and Christ in the Church. With Loisy he discovers in Catholicism the most complete expression of Christianity, for the Church is nothing more nor less than the continuation of the Gospel through the ages.

Conclusion

We are now at the end of our task. The course of our exposition should make any detailed final review and criticism unnecessary. The plan of our undertaking was rather a synthetic construction than an analytical dissection. A mere impersonal and colourless arrangement of thinkers and theories was consequently inadequate. We purposed rather to feel for the inward connection in what appeared to be chaos, and, as far as we were able, to find expression for it. *Our aim was to give a meaning*

to the present philosophical movement in France. Anything like a thoroughgoing, rational labelling and classification was beyond our scope. It may be that our intention has led us too far in places—that we have read into the present situation more meaning and more connection than are really there—that we have wrongly placed this or that philosopher—that in our convinced belief in a progress from the Comtian-empiricist to the metaphysico-spiritual Positivism we have discerned purpose where there was no purpose. Yet in an undertaking of this class such errors are unavoidable. No history can be written that is absolutely free from assumptions. But this much we are justified in claiming, that we have striven to the best of our ability to treat each thinker sympathetically, so as to give fair emphasis to the original element in his teaching, however great the discrepancy between his views and our own may be. The very nature of the sketch was bound to make a complete presentation impossible. And this limitation has caused us much hesitation. Our apology and our consolation is this—that we have, if the expression may be allowed, drawn from a full store. This present sketch, which we undertook at the kind invitation of Dr. Tudor Jones and the Publishers, is the quintessence of a work on a larger scale, which is shortly to appear under the

title of "Philosophical Tendencies of the Present in France," in the composition of which we have been engaged for almost a quarter of a century. And yet the sketch we now present is an independent work; and we hope that it will fulfil its purpose as an introduction to the study of present-day Philosophy in France.

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