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LOGIC AS THE SCIENCE OF THE PURE CONCEPT



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LOGIC

AS THE SCIENCE OF THE PURE CONCEPT

TRANSLATED FROM THE ITALIAN OF
BENEDETTO CROCE

BY

DOUGLAS AINSLIE
B.A. (Oxon.), M.R.A.S.

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1917

TRANSLATOR'S PREFACE

THE publication of this third volume of the *Philosophy of the Spirit* offers a complete view of the Crocean philosophy to the English-speaking world.

I have striven in every way to render the Logic the equal of its predecessors in accuracy and elegance of translation, and have taken the opinion of critical friends on many occasions, though more frequently I have preferred to retain my own. The vocabulary will be found to resemble those of the *Æsthetic* and the *Philosophy of the Practical*, thereby enabling readers to follow the thought of the author more easily than if I had made alterations in it. Thus the word "fancy" will be found here as elsewhere, the equivalent of the Italian "fantasia" and "imagination" of "immaginazione"; this rendering makes the meaning far more clear than the use of the words in the opposite sense that they occasionally bear in English; this is particularly so in respect of the

important distinction of the activities in the early part of the *Æsthetic*. I have also retained the word "gnoseology" and its derivatives, as saving the circumlocutions entailed by the use of any paraphrase, especially when adjectival forms are employed.

I think that this Logic will come to be recognized as a masterpiece, in the sense that it supplants and supersedes all Logics that have gone before, especially those known as formal Logics, of which the average layman has so profound and justifiable mistrust, for the very good reason that, as Croce says, they are not Logic at all, but illogic—his healthy love of life leads him to fight shy of what he feels would lead to disaster if applied to the problems that he has to face in the conduct of life. It is shown in the following pages that the prestige of Aristotle is not wholly to blame for the survival of formal Logic and for the class of mind that denying thought dwells ever in the *ipse dixit*. Indeed, one of the chief boons conferred by this book will be the freeing of the student from that confusion of thought and word that is the essence of the old formal Logic—of thought that rises upon the wings of words, like an aviator upon his falcon of wood and metal to spy out the entrenchments of the enemy.

One of the most stimulating portions of the book will, I think, be found in Croce's theory of error and proof of its necessity in the progress of truth. This may certainly be credited to Croce as a discovery. That this theory of the uses of error has a great future, I have no doubt, from its appearance at certain debates on Logic that have taken place at the Aristotelian Society within the last year or two, though strangely enough the name of the philosopher to whom it was due was not mentioned. A like mysterious aposiopesis characterized Professor J. A. Smith's communication to the same Society as to the development of the ethical from the economic activity (degrees of the Spirit) some years after the publication of the *Philosophy of the Practical.*

It is my hope that this original work, appearing as it does in the midst of the great struggle with the Teutonic powers, may serve to point out to the Anglo-Saxon world where the future of the world's civilization lies, namely in the ancient line of Latin culture, which includes in itself the loftiest Hellenic thought. It is sad to think that the Germans have relapsed to barbarism from the veneer of cultivation that they once possessed, particularly sad when one comes upon the German names that must always abound in any treatise

on the development of thought. Their creative moment, however, was very brief, and the really important names can be numbered on the fingers of one hand, that of Emmanuel Kant being corrupted from the Scots Cant. Of recent years the German contribution has been singularly small and unimportant, such writers as Eucken being mere compilers of the work of earlier philosophers, and without originality. The foul-souled Teuton will need a long period of re-education before he can be readmitted to the comity of nations upon equal terms—his bestiality will ask a potent purge.

In conclusion, I can only hope that the fact of this work having been put into the hands of readers a decade earlier than would in all probability have been the case, had I not been fortunate enough to make a certain journey to Naples, will be duly taken advantage of by students, and that it will serve for many as a solid foundation for their thought about thought, and so of their thought about the whole of life and reality in the new world that will succeed the War.

DOUGLAS AINSLIE.

THE ATHENAEUM, PALL MALL,
March 1917.

ADVERTISEMENT

THIS volume is, and is not, the memoir entitled *Outlines of Logic as the Science of the Pure Concept*, which I presented to the Accademia Pontiana at the sessions of April 10 and May 1, 1904, and April 2, 1905, and which was inserted in volume xxxv. of the *Transactions* (printed as an extract from them by Giannini, Naples, 1905, in quarto, pp. 140).

I might have republished that memoir, and made in it certain corrections, great and small, and especially I might have enriched it with very numerous developments. But partial corrections and copious additions, while they would have injured the arrangement of the first work, would not have allowed me to attain to that more secure and fuller exposition of logical doctrine which, after four years' study and reflection, it now seems to be in my power to offer. I have therefore resolved to rewrite the work from the beginning on a larger scale, with a new arrangement and

new diction regarding its predecessor as a sketch, which in a literary sense stands by itself, and only making use of a page, or group of pages, here and there, as suited the natural order of exposition.

Owing to this connection between the present volume with the above-mentioned academic memoir, it will be seen in what sense it may be called, and is called, a "second edition." It is a second edition of my thought rather than of my book.

B. C.

NAPLES,
November 1908.

PREFACE TO THIRD ITALIAN EDITION OF THE *LOGIC*

On reprinting the present volume, after an interval of seven years, I have reread it with attention to its literary form, but have made no substantial changes or additions to it; because the further development of that part which deals with the logic of Historiography has been collected in a special volume, forming as it were an appendix. This is now the fourth volume of the *Philosophy of the Spirit.*

It seemed to many, upon the first publication of this volume, that it chiefly consisted of a very keen attack upon Science. Few, above all, discovered what it was: *a vindication of the seriousness of logical thought*, not only in respect to empiricism and abstract thought, but also to intuitionist, mystical and pragmatistic doctrines, and to all the others then very vigorous, which, including justly combated positivism, distorted every form of logicity.

Nor, in truth, did its criticism of Science favour what is known as a philosophy "detesting facts": indeed, the chief preoccupation of that criticism was meticulous respect of facts, which was neither observed nor observable in empirical and abstract constructions and in the analogous mythologies of naturalism. The character of this *Logic* might equally be described as affirmation of the concrete universal and affirmation of the concrete individual, as proof of the Aristotelian *Scientia est de universalibus* and proof of Campanella's *Scientia est de singularibus.* In this manner those empty generalizations and fictitious riches which are removed from philosophy in the course of treatment, there appear more than amply, infinitely compensated for by the restitution to it of its own riches, *of the whole of history*, both that known as human and that known as history of nature. Henceforward it can live there as in its own dominion, or rather its own body, which is co-extensive with and indivisible from it. The separation there effected by philosophy from science is not separation from what is *true knowledge in science*, that is from the historical and real elements of science. It is only separation from the schematic form in which those elements are compressed, mutilated and altered. Thus it may also be de-

scribed as a reconnection of it with what of living, concrete and progressive exists in those sciences. If the destruction of anything be aimed at in it, that can clearly be nothing but abstract and anti-historical philosophy. This *Logic* must thus be looked upon as a liquidation of philosophy rather than of science, if abstract science be posited as true philosophy.

That point is dwelt upon in the polemic against the idea of a general philosophy which should stand above *particular philosophies*, or the methodological problems of historical thought. The distinction of general philosophy from particular philosophies (which are true generality in their particularity) seems to me to be the gnoseological residue of the old dualism and of the old transcendency; a not innocuous residue, for it always tends to the view that the thoughts of men upon particular things are of an inferior, common and vulgar nature, and that the thought of totality or unity is alone superior and alone completely satisfying. The idea of a general philosophy prepares in this way consciously or otherwise for the restoration of Metaphysic, with its pretension of rethinking the already thought by means of a particular thought of its own. This, when it is not altogether religious revelation,

becomes the caprice of the individual philosopher. The many examples offered by post-Kantian philosophy are proof of this. Here Metaphysic raged so furiously and to such deleterious effect as to involve guiltless philosophy in its guilt. The latent danger always remains, even if this restoration of Metaphysic does not take place, for if it never becomes effective because it is carefully watched and restrained, the other drawback persists, namely, that that general philosophy, or super-philosophy or super-intelligence desired, while it does not succeed in making clear particular problems, which alone have relation to concrete life, nevertheless in a measure discredits them, by judging them to be of slight importance and by surrounding them with a sort of mystical irony.

To annul the idea of a "general" philosophy is at the same time to annul the "static" concept of the philosophic system, replacing it with the dynamic concept of simple historical "systemizations" of groups of problems, of which particular problems and their solutions are what remain, not their aggregate and external arrangement. This latter satisfies the needs of the times and of authors and passes away with them, or is preserved and admired solely for æsthetic reasons

when it possesses them. But those who retain some superstitious reverence for "General Philosophy" or "Metaphysic" have still a superstitious reverence for what are known as static systems. In so doing they behave in a rational manner, for they cannot altogether free themselves from the claims of a definitive philosophy which is to solve once and for all the so-called "enigma of the world" (imaginary because there are infinite enigmas which appear and are solved in turn, but there is not the Enigma), and is to provide the "true system" or "basis" of the true system. Nevertheless I hope that good fortune will attend the doctrine of the concept here set out, not only because it seems to me to afford the satisfaction proper to every statement of truth, namely, to accord with the reality of things, but also (if I may so express myself) because it carries with it certain immediate and tangible advantages. Above all, it relieves the student of philosophy of the terrible responsibility — which I should never wish to assume — of supplying the Truth, the unique eternal Truth, and of supplying it in competition with all the greatest philosophers who have appeared in the course of centuries. Further, it removes from him together both the

hope of the definitive system and the anxious fear of the mortal doom which will one day strike the very system that he has so lovingly constructed, as it has struck those of his predecessors. At the same time it sets him out of reach of the smiling non-philosophers who foresee with accuracy and are almost able to calculate the date of that not distant death. Finally, it frees him from the annoyance of the "school" and of the "scholars"; "school" and "scholars" in the sense of the old metaphysicians are no longer even conceivable, when the idea of "systems" having their "own principles" has been abolished. All dynamic systems or provisory systemizations of ever new problems have the same principle, namely, Thought, *perennis philosophia*. There has not been and never will be anything to add to this. And although the many propositions and solutions of problems strive among themselves to attain harmony, yet to each, if it be truly thought, is promised eternal life, which gives and receives vigour from the life of each of the others. This is just the opposite of what takes place with static systems which collapse, one upon the other, only certain portions of good work surviving them in the shape of happy treatment of special problems which are to be found mingled with

the metaphysic of every true philosopher. And although there is no longer a field left over to these scholars who merely faithfully echo the master, like adepts of a religion, there is yet a wide field always open to the other type of scholar, men who pay serious attention and assimilate what is of use to them in the thought of others, but then proceed to state and to solve new problems of their own. Finally, the life of philosophy as conceived and portrayed in this *Logic*, resembles the life of poetry in this: that it does not become effective save in passing from *different* to *different*, from one original thinker to another, as poetry passes from poet to poet, and imitators and schools of poetry, although they certainly belong to the world, yet do not belong to the world of poetry.

B. C.

September 1916.

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FIRST PART

THE PURE CONCEPT, THE INDIVIDUAL JUDGMENT, AND THE *A PRIORI* LOGICAL SYNTHESIS

FIRST SECTION

THE PURE CONCEPT AND THE PSEUDO-CONCEPTS

I

AFFIRMATION OF THE CONCEPT

Thought and sensation.

PRESUPPOSED in the logical activity, which is the subject of this treatise, are representations or intuitions. If man had no representations, he would not think; were he not an imaginative spirit, he would not be a logical spirit. It is generally admitted that thought refers back to sensation, as its antecedent; and this doctrine we have no difficulty in making our own, provided it be given a double meaning. That is to say, in the first place, sensation must be conceived as something active and cognitive, or as a cognitive act; and not as something formless and passive, or active only with the activity of life, and not with that of contemplation. And, in the second place, sensation must be taken in its

purity, without any logical reflection and elaboration; as simple sensation, that is to say, and not as perception, which (as will be seen in the proper place), so far from being implied, in itself implies logical activity. With this double explanation, sensation, active, cognitive and unreflective, becomes synonymous with representation and intuition; and certainly this is not the place to discuss the use of these synonyms, though there are excellent reasons of practical convenience pointing to the preference of the terms which we have adopted.

At all events, the important thing is to bear clearly in mind, that the logical activity, or thought, arises upon the many-coloured pageant of representations, intuitions, or sensations, whichever we may call them; and by means of these, at every moment the cognitive spirit absorbs within itself the course of reality, bestowing upon it theoretic form.

Thought and language.

Another presupposition is often introduced by logicians: that of language; since it seems clear that, if man does not speak, he does not think. This presupposition also we accept, adding to it, however, a corollary, together with certain elucidations. The elucidations are: in the first place, that language must be taken in its genuine

and complete reality; that is to say, it must not be arbitrarily restricted to certain of its manifestations, such as the vocal and articulate; nor be changed and falsified into a body of abstractions, such as the classes of Grammar or the words of the Vocabulary, conceived as these are in the fashion of a machine, which man sets in motion when he speaks. And, in the second place, by language is to be understood, not the whole body of discourses, taken all together and in confusion, into which (as will be seen in its place) logical elements enter; but only that determinate aspect of these discourses, in virtue of which they are properly called language. A deep-rooted error, which springs directly from the failure to make this distinction, is that of believing language to be constituted of logical elements; adducing as a proof of this that even in the smallest discourse are to be found the words *this*, *that*, *to be*, *to do*, and the like, that is, logical concepts. But these concepts are by no means really to be found in every expression; and, even where they are to be found, the possibility of extracting them is no proof that they exhaust language. So true is this that those who cherish this conviction are afterwards obliged to leave over as a residue of their analysis, elements which they consider to

be illogical and which they call *emphatic*, *complementary*, *colorative*, or *musical*: a residue in which is concealed true language, which escapes that abstract analysis. Finally, the corollary is that if the concept of language is thus rectified, the presupposition made for Logic regarding language is not a *new* presupposition, but is identical with that already made, when representations or intuitions were discussed. In truth, language in the strict sense, as we understand it, is equivalent to expression; and expression is identical with representation, since it is inconceivable that there should be a representation, which should not be expressed in some way, or an expression which should represent nothing, or be meaningless. The one would fail to be representation, and the other would not even be expression; that is to say, both must be and are, one and the same.

Intuition and language as presuppositions.

What is a real presupposition of the logical activity, is, for that very reason, not a presupposition in Philosophy, which cannot admit presuppositions and must think and demonstrate all the concepts that it posits. But it may conveniently be allowed as a presupposition for that part of Philosophy, which we are now undertaking to treat, namely Logic; and the existence of the representative or intuitive form of know-

ledge be taken for granted. After all, scepticism could not formulate more than two objections to this position: either the negation of knowing in general; or the negation of that form of knowing which we presuppose. Now, the first would be an instance of absolute scepticism; and we may be allowed to dispense with exhibiting yet again the old, but ever effective argument against absolute scepticism which may be found in the mouths of all students at the university, even of the boys in the higher elementary classes (and this dispensation may more readily be granted, seeing that we shall unfortunately be obliged to record many obvious truths of Philosophy in the course of our exposition). But we do not mean by this declaration that we shall evade our obligation to show the genesis and the profound reasons for this same scepticism, when we are led to do so by the order of our exposition. The second objection implies the negation of the intuitive activity as original and autonomous, and its resolution into empirical, hedonistic, intellectualist, or other doctrines. But we have already, in the preceding volume,[1] directed our efforts towards making the intuitive activity immune against such doctrines,

[1] See the first volume of this *Philosophy as Science of the Spirit; Æsthetic as Science of Expression.*

that is to say, towards demonstrating the autonomy of fancy and establishing an Æsthetic. So that, in this way, the presupposition which we now allow to stand has here its pedagogic justification, since it resolves itself into a reference to things said elsewhere.

Scepticism as to the concept.

Facing, therefore, without more ado, the problem of Logic, the first obstacle to be removed will not be absolute scepticism nor scepticism concerning the intuitive form; but a new and more circumscribed scepticism, which does not question the two first theses, indeed relies upon them, and negates neither knowledge nor intuition, but *logical* knowledge itself. Logical knowledge is something beyond simple representation. The latter is individuality and multiplicity; the former the *universality* of individuality, the *unity* of multiplicity; the one is intuition, the other *concept*. To know logically is to know the universal or concept. The negation of logic is the affirmation that there is no other knowledge than representative (or sense knowledge, as it is called), and that universal or conceptual knowledge does not exist. Beyond simple representation, there is nothing knowable.

Were this so, the treatise which we are preparing to develop would have no subject-

matter whatever, and would here cease, since it is impossible to seek out the nature of what does not exist, that is, of the concept, or how it operates in relation to the other forms of the Spirit. But that this is not so, and that the concept really exists and operates and gives rise to problems, undoubtedly results from the negation itself, pronounced by that form of scepticism which we will call *logical*, and which is, indeed, the only negation conceivable upon this point. Thus, we can speedily reassure ourselves as to the fate of our undertaking; or, if it be preferred, we must at once abandon the hope which we conjured up before ourselves, and resign ourselves to the labour of constructing a Logic; a labour which logical scepticism, by restricting us to the sole form of representation, had, as it seems, the good intention of sparing us.

Its three forms.

Logical scepticism, in fact, can assume three forms. It may affirm simply that representative knowledge is the whole and that unity or universality, whose existence we have postulated, are words without meaning. Or it may affirm that the demand for unity is justified, but that it is satisfied only by the non-cognitive forms of the Spirit. Or, finally, it may affirm that the demand is certainly satisfied by these non-cognitive forms,

but only in so far as they react upon the cognitive, that is to say, upon the one admitted form of the cognitive, namely, the representative. It is clear that there is no other possibility beyond these three, either that of being satisfied with representative knowledge; or of being satisfied with something non-cognitive; or of combining these two forms. In the first case, we have the theory of *æstheticism* (which could also be correctly called sensationalism, if this did not happen to be an inconvenient term, by reason of the misunderstanding which might easily spring from it); in the second, the theory of *mysticism*; in the third, that of *empiricism* or *arbitrarism*.

Æstheticism. According to æstheticism, in order to understand the real, it is not necessary to think by means of concepts, to universalize, to reason, or to be logical. It suffices to pass from one spectacle to another; and the sum of these, increased to infinity, is the truth which we seek, and which we must refrain from transcending, lest we fall into the void. The *sub specie aeterni* would be just like that mirror of water which deceived the avidity of the dog of Phædrus, and made it leave the real for the illusory food. For the cold and fruitless quest of the logician there is substituted the rich and moving contemplation

of the artist. Truth lies in works of speech, of colour, of line, and not at all in the vain babblings of philosophy. Let us sing, let us paint, and not compel our minds to spasmodic and sterile efforts.

Mysticism.

The æstheticist's attitude may be considered as that of the spirit, which comes out of itself and disperses itself among things, while keeping itself above and aloof from them, contemplating, but not immersing itself in them. Mysticism is not satisfied with this, feeling that no repose is ever accorded to the spirit which abandons itself to this orgy, this breathless adventure of infinitely various spectacles, and that the intimate meaning of them all escapes the æstheticist. It is true that there is no logical knowledge, that the concept is sterile, but the claim for unity is legitimate, and demands to be, and is, satisfied. But in what way is it satisfied? Art speaks, and its speech, however beautiful, does not content us; it paints, and its colours, however attractive, deceive us. In order to find the inmost meaning of life, we must seek, not the light, but the shade, not speech, but silence. In silence, reality raises its head and shows its countenance; or, better, it shows us nothing, but fills us with itself, and gives us the sense of its very being. The unity and

universality that we desire are found in action, in the practical form of the Spirit: in the heart, which palpitates, loves, and wills. Knowledge is knowledge of the single, it is representation; the eternal is not a matter of knowledge, but of *intimate and ineffable experience.*

Empiricism. If the sceptics of logico-æsthetic type are chiefly artistic souls, the logico-mystical sceptics are sentimental and perturbed souls. These, although they do not usually take an entirely active part in life, yet do to some extent take part in it, vibrating in sympathetic unison with it, and, according to circumstances, suffering, sometimes through taking part, and sometimes through failing so to do. Empiricists or arbitrarists are to be found, on the other hand, among those who, engaged in practical affairs, do not indulge in emotions and sentiments, but aim at producing definite results. Thus, while they are in complete agreement with the æstheticists and the mystics in denying all value to logical knowledge as an autonomous form of knowledge, they are not satisfied, like the former, with spectacles and with works of art; nor are they caught, like the latter, in the madness and sorcery of the One and Eternal. The combination which they effect, of the æstheticist's thesis concerning

the value of representation, with the mystical concerning the value of action, strengthens neither, but weakens both; and in exchange for the poetry of the first and for the ecstasy of the second, it offers an eminently prosaic product countersigned with a most prosaic name, that of *fiction*. There is something (they say) beyond the mere representation, and this something is an act of will; which also satisfies the demand for the universal, not by shutting itself up in itself, but by means of a manipulation of single representations, so concentrated and simplified as to give rise to classes or symbols, which are without reality but convenient, fictitious but useful. Ingenuous philosophers and logicians have allowed themselves to be deceived by these puppets and have taken them seriously, as Don Quixote took the Moorish puppets of Master Peter. Forgetful of the nature and character of the complete operation, they have proceeded to concentrate and to simplify where there is no material for such an undertaking, claiming to group afresh, not only this or that series of representations, but all representations, hoping thus to obtain the universal concept, that is to say, the concept which enfolds in its bosom the infinite possibilities of the

real. Thus they have attained the pretended new and autonomous form of knowledge which goes beyond representations; a refined, but slightly ridiculous process of thought, like that of a man who would like to make not only knives of various sizes and shapes, but a knife of knives, beyond all knives which have a definite shape and are made of iron and steel.

Reduction to the absurd of the three forms.

We shall proceed to examine in their places both the errors resulting from these modes of solving, or of cutting, the problem of knowledge, and also the partial truths mingled with them which it is necessary to exhibit in their full efficacy. But, at the point which now occupies us, *i.e.*, the affirmation or negation of the conceptual form of knowledge, let it suffice to observe how all the ranks of those who deny the concept move to the assault armed with the *concept*. We need simply observe, not strive to confute, because it is a question of something which leaps to the eye at once and does not demand many words; although many would be necessary to illustrate psychologically the conditions of spirit and of culture, the natural and acquired tendencies, the habits and the prejudices, which render such marvellous blindness possible. The æstheticists affirm that truth resides in æsthetic contempla-

tion and not in the concept. But, pray, is this affirmation of theirs perchance song, or painting, or music, or architecture? It certainly concerns intuition, but it is not intuition; it has art for subject-matter, but it is not art; it does not communicate a state of the soul, but communicates a thought, that is to say, an affirmation of universal character; therefore, it is a concept. And by this concept it is sought to deny the concept. It is as if one sought to leap over one's own shadow, when the leap itself throws the shadow, or, by clinging to one's own pigtail, to pull oneself into safety out of the river. The same may be said of the mystics. They proclaim the necessity of silence and of seeking the One, the Universal, the I, concentrating upon themselves and letting themselves live; during which mystical experience it may, perhaps, befall them (as in the *Titan* of J. P. Richter) to rediscover the I, in a somewhat materialized form, in their own person. Nevertheless in the case of those who recommend silence, *non silent silentium*, they do not pass it by in silence; rather, it has been said, they *proclaim* it, and go about explaining and demonstrating how efficacious their prescription is for satisfying the desire for the universal. Were they silent about it, we should not be faced with that doctrine, as

a precise formula to combat. The doctrine of silence and of silent action and inner experience is nothing but an affirmation of absolute character and universal content, by means of which are refuted, and it is believed confuted, other affirmations of the same nature. This too, then, is a concept; as contradictory as you will, and therefore, needing elaboration, but always conceptual elaboration and not practical; which last would altogether prevent the adepts in the doctrine from talking. And who, in our day, talks as much as the mystics? Indeed, what could they do, in our day, if they did not talk? And is it not significant that mystics are now found, not in solitudes, but crowded round little tables in the cafés, where it is customary, not so much to achieve inner experiences, as, on the contrary, to chatter? Finally, the theorists of fictions and of toys, in their amiable satire of logic and of philosophy, forget to explain one small particular, which is not without importance; that is to say, whether their theory of the concepts as fiction, is in its turn *fiction*. Because, were it fiction, it would be useless to discuss it, since by its own admission it is without truth; and if it were not (as it is not), it would have a character of true and not fictitious universality; or, it would

be, not at all a simplification and symbol of representations, but a concept, and would establish the true concept at the very moment that it unmasks those that are fictitious. Fiction and the theory of fiction are (and it should appear evident) different things; as the delinquent and the judge who condemns him are different, or the madman and the doctor who studies madness. A fiction, which pretends to be fiction, opens, at the most, an infinite series which it is not possible to close, unless there eventually intervene an act which is not fiction, and which explains all the others, as in the unravelling of a comedy of cross-purposes. And this is the way that the empiricists or arbitrarists also come to profess the faith that they would deny. *Salus ex inimicis* is a great truth for philosophy not less than for the whole of life; a truth, which on this occasion finds beautiful confirmation in the hostility towards the concept, perhaps never so fierce as it is to-day, and in the efforts to choke it, never so great and never so courageously and cleverly employed. But those enemies find themselves in the unhappy condition of being unable to choke it, without in the very act suppressing the principle of their own life.

Affirmation of the concept.

The concept, then, is not representation, nor is it a mixture and refinement of representation.

It springs from representations, as something implicit in them that must become explicit; a necessity whose premisses they provide, but which they are not in a position to satisfy, not even to affirm. The satisfaction is afforded by the form of knowledge which is no longer representative but logical, and which occurs continually and at every instant in the life of the Spirit.

To deny the existence of this form, or to prove it illusory by substituting other spiritual formations in its place, is an attempt which has been and is made, but which has not succeeded and does not succeed, and which, therefore, may be considered desperate. This series of manifestations, this aspect of reality, this form of spiritual activity, which is the Concept, constitutes the object of Logic.

II

THE CONCEPT AND THE PSEUDOCONCEPTS

Concepts and conceptual fictions.

By distinguishing the concept from representations, we have recognized the legitimate sphere of representation, and have assigned to it in the system of spirit the place of an antecedent and more elementary form of knowledge. By distinguishing the concept from states of the soul, from efforts of the will, from action, it is intended also to recognize the legitimacy of the practical form, although we are not here able to enlarge upon its relations with the cognitive form.[1] But by distinguishing the concept from *fictions*, it would almost seem that in their case we have not explicitly admitted any legitimate province, that, indeed, we have implicitly denied it, since we have adopted for them a designation which in itself sounds almost like a condemnation. This point must be made clear; because it would be im-

[1] These relations are examined in the *Philosophy of the Practical*, first part.

possible to go further with the treatment of Logic, if we left doubtful and insecure, that is, not sufficiently distinguished, one of the terms, from which the concept must be distinguished. What are conceptual fictions? Are they false and arbitrary concepts, morally reprehensible? Or are they spiritual products, which aid and contribute to the life of the spirit? Are they avoidable evils, or necessary functions?

The pure concept as ultra- and omni-representative.

A true and proper concept, precisely because it is not representation, cannot have for content any single representative element, or have reference to any particular representation, or group of representations; but on the other hand, precisely because it is universal in relation to the individuality of the representations, it must refer at the same time to all and to each. Take as an example any concept of universal character, be it of *quality*, of *development*, of *beauty*, or of *final cause*. Can we conceive that a piece of reality, given us in representation, however ample it may be (let it even be granted that it embraces ages and ages of history, in all the complexity of the latter, and millenniums and millenniums of cosmic life), exhausts in itself quality or development, beauty or final cause, in such a way that we can affirm an equivalence between those concepts and

that representative content? On the other hand, if we examine the smallest fragment of representable life, can we ever conceive that, however small and atomic it be, there is lacking to it quality and development, beauty and final cause? Certainly, it may be and has been affirmed, that things are not quality, but pure quantity; that they do not develop, but remain changeless and motionless; that the criterion of beauty is the arbitrary extension which we make to cosmic reality of some of our narrow individual and historical experiences and sentiments; and that final cause is an anthropomorphic conception, since not "end" but "cause" is the law of the real, not teleology but mechanism and determinism. Philosophy has been and is still engrossed in such disputes; and we do not here present them as definitely solved, nor do we intend to base ourselves upon determinate conceptions in the choice of our examples. The point is, that if the theses which we have just mentioned as opposed to the first, were true, they would furnish, in every case, true and proper concepts, superior to every representative determination, and embracing in themselves all representations, that is to say, every possible experience; and our conception of the concept would not thereby be changed, but

indeed confirmed. Final cause or mechanism, development or motionless being, beauty or individual pleasure, would always, in so far as they are concepts, be posited as ultrarepresentative and at the same time omnirepresentative. Even if, as often happens, both the opposed concepts were accepted for the same problem, for example, final cause and mechanism, or development and unmoved substance, it is never intended simply to apply either of them to single groups of representations, but to make them elements and component parts of all reality. Thus, every reality would be, on one side, end, and on the other, cause; on one side, motionless, on the other, changeable; man would have in himself something of the mechanical and something of the teleological; nature would be matter, but urged forward by a first cause which was non-material, that is, spiritual and final, or at least unknown—and so on. When it is demonstrated of a concept that it has been suggested by contingent facts, by this very fact we eliminate it from the series of true concepts, and substitute for it another concept, which is given as truly universal. Or again, we suppress it without substituting another for it, that is to say, we reduce the number of true and proper concepts. Such a reduction is a progress

of thought, but it is a progress which can never be extended to the abolition of all concepts, because one, at least, will always remain ineliminable; that of thought, which thinks the abolition; and this concept will be ultra- and omnirepresentative.

Conceptual fictions as representative without universality,

Fictional concepts or conceptual fictions are something altogether different. In these, either the content is furnished by a group of representations, even by a single representation, so that they are not ultrarepresentative; or there is no representable content, so that they are not omnirepresentative. Examples of the first type are afforded by the concepts of *house*, *cat*, *rose*; of the second, those of *triangle*, or of *free motion*. If we think of the house, we refer to an artificial structure of stone or masonry or wood, or iron or straw, where beings, whom we call men, are wont to abide for some hours, or for entire days and entire years. Now, however great may be the number of objects denoted by that concept, it is always a finite number; there was a time when man did not exist, when, therefore, neither did his house; and there was another time when man existed without his house, living in caverns and under the open sky. Of course, undoubtedly, we shall be able to extend the concept of house, so as to include also the places inhabited by

animals; but it will never be possible to follow with absolute clearness the distinction between artificial and natural (the act of inhabiting itself makes the place more or less artificial, by changing, for instance, the temperature); or between the animals which are inhabitants and the non-animals, which nevertheless are inhabitants, such as plants, which, as well as animals, often seek a roof; admitting that certain plants and animals have other plants and animals as their houses. Hence, in view of the impossibility of a clear and universal distinctive character, it is advisable to have recourse at once to enumeration and to give the name house to certain particular objects, which, however numerous they are, are also finite in number, and which, with the enumeration complete, or capable of completion, exclude other objects from themselves. If it is desired to prevent this exclusion, no other course remains than that of understanding by *house* any mode of life between different beings; but in that case, the conceptual fiction becomes changed into a universal, lacking particular representations, applicable alike to a house and to any other manifestation of the real. The same may be said of the cat and of the rose, since it is evident that cats and roses have appeared on the earth at a definite time and will

disappear at another, and that while they endure, they can be looked upon as something fixed and precise, only when we have regard to some particular group of cats and of roses, indeed to one particular cat or rose at a definite moment of its existence (a gray cat or a black cat, a cat or a kitten; a white rose or a red rose, flowering or withered, etc.), elevated into a symbol and representative of the others. There is not, and there cannot be, a rigorous characteristic, which should avail to distinguish the cat from other animals, or the rose from other flowers, or indeed a cat from other cats and a rose from another rose. These and other fictional concepts are, therefore, representative, but not ultrarepresentative; they contain some objects or fragments of reality, they do not contain it all.

or universals void of representations

The conceptual fictions of the triangle and of free motion have an analogous but opposite defect. With them, it appears, we emerge from the difficulties of representations. The triangle and free motion are not something which begins and ends in time and of which we are not able to state exactly the character and limits. So long as thought, that is to say, thinkable reality, exists, the concept of the triangle and of free motion will have validity. The triangle is formed by

the intersection of three straight lines enclosing a space and forming three angles, the sum of which, though they vary from triangle to triangle, is equal to that of two right angles. It is impossible to confuse the triangle with the quadrilateral or the circle. Free motion is a motion, which we think of as taking place without obstacles of any sort. It is impossible to confuse it with a motion to which there is any particular obstacle. So far so good. But if those conceptual fictions let fall the ballast of representations, they ascend to a zone without air, where life is impossible; or, to speak without metaphor, they gain universality by losing reality. There is no geometric triangle in reality because in reality there are no straight lines, nor right angles nor sums of right angles, nor sums of angles equal to that of two right angles. There is no free motion in reality, because every real motion takes place in definite conditions and therefore among obstacles. A thought, which has as its object nothing real, is not thought; and those concepts are not concepts but conceptual fictions.

Critique of the doctrine which considers them to be erroneous concepts,

Having made clear, by means of these examples, the character of concepts and of fictional concepts, we are prepared to solve the question as to whether the second are legitimate or illegitimate

products, and if they merit the reproach which seems to attach to their name. And certainly, a view which has had and still has force does not hesitate to consider those fictions as nothing but *erroneous concepts*, and declares a war of extermination against them, in the name of rigorous thought and of truth. If it follows from what we have said, that the cat or the house or the rose are not concepts, and that the geometrical triangle or free motion are not so either, the conclusion seems inevitable that we must free ourselves from these errors or misconceptions, and affirm that there is neither the cat nor the rose nor the house, but a reality all compact (although it is continuously changing) which develops and is new at every instant; nor is there either the triangle or free motion, but the eternal forms of this reality, which cannot be abstracted and fixed by themselves, and deprived of the conditions which are an integral part of them. But a single fact suffices to invalidate this conclusion and to confute the premiss upon which it rests, that conceptual fictions are erroneous concepts. An error once discovered cannot reappear, at least until the discovery is forgotten, and there is a falling back into the conditions of mental obscurity similar to those antecedent to the discovery.

When, for example, the position has been attained that morality is not a phenomenon of egoism and that it has value in itself, or one has become certain that Hannibal was ignorant of the disaster that befell his brother Hasdrubal on the Metaurus, it is impossible to continue believing that morality is egoism, or that Hannibal has been informed of the arrival of Hasdrubal and had voluntarily allowed him to be surprised by the two Consuls. But with conceptual fictions similar to those in the example the case is otherwise. Even when we are persuaded that the triangle and free motion correspond to nothing real, and that the rose, the cat, and the house have nothing precise and universal in them, we must yet continue to make use of the fictions of triangles, of free motion; of houses, cats, and roses. We can criticise them, and we cannot renounce them; therefore, it is not true that they are, at least altogether and in every sense, errors.

or imperfect concepts preparatory to perfect concepts.

This indispensability of conceptual fictions to the life of the spirit, finds acknowledgment in a more temperate form of the doctrine which considers them as erroneous concepts; that is, in the thesis that they are erroneous, but at the same time preparatory to, and almost a first step towards, the formation of true and proper concepts.

The spirit does not issue all at once from representations and attain to the universal; it issues from them little by little, and prior to the rigorous universal, it constructs others less rigorous, which have the advantage of replacing the infinite representations with their infinite shades, through which reality presents itself in æsthetic contemplation. Conceptual fictions, then, would be sketches of concepts, and therefore, like all sketches, capable of revision and annulment, but useful. Thus it would be explained how they are errors, and errors made for a good reason. But this moderate theory also clashes noisily with the most evident facts. Above all, it is not true that the spirit issues little by little from the representations, passing through a series of grades; the procedure of the spirit, in this regard, is altogether different, and when philosophers have wanted to find a comparison for it, they have been obliged to come back to that very 'leap' which they wanted to avoid: "Spirit (said Schelling, for example,) is an *eternal island*, which is not to be reached from matter, without a leap, whatever turns and twists be made." And, for this very reason, conceptual fictions are not good passages to rigorous concepts: to think rigorously, we must plunge ourselves again

into the flood of representations and think immediate reality, clearing away the obstacles that proceed from conceptual fictions. And always for the same reason, rigorous concepts, when they find themselves confronted with conceptual fictions as rivals in the same problem, do not claim their assistance, nor correct, nor refine upon them, in order partially to preserve them, but combat and destroy them. What the rigorous concepts are unable to do, is to prevent the others from reappearing; because the spirit, as has been seen, preserves, without correcting them, although it has recognized their falsity: it preserves them, that is to say, not fused and rendered true in the rigorous concepts, but *outside and after these.*

Posteriority of conceptual fictions to true and proper concepts.

In short, we have to abandon entirely the idea that conceptual fictions are errors, or sketches and aids, and that they precede rigorous concepts. Quite the opposite is true: conceptual fictions do not precede rigorous concepts, but follow them, and presuppose them as their own foundation. Were this not so, of what could they ever be fictions? To counterfeit or imitate something implies first knowledge of the thing which it is desired to counterfeit or to imitate. To falsify means to have knowledge of

the genuine model: false money implies good money, not vice versa. It is possible to think that man, from being the ingenuous poet that he first was, raised himself, immediately, to the thought of the eternal; but it is not possible to think that he constructed the smallest conceptual fiction, without having previously imagined and thought. The house, the rose, the cat, the triangle, free motion presuppose quantity, quality, existence, and we know not how many other rigorous concepts: they are made with iron instruments great and small, which logical thought has created, and which come to be used with such rapidity and naturalness that we usually end by believing that we have proceeded without them. Whoever makes conceptual fictions, has already taken his logical bearings in the world: he knows what he is doing and reasons about it; progress with his conceptual fictions depending upon progress with his rigorous concepts, and being continuously remade, according to the new needs and the new conditions which are formed. Now that the concept of miracle or witchcraft has been destroyed, the conceptual fictions relating to the various classes and modes of miraculous facts and acts of witchcraft are no longer constructed; and since the

destruction of the belief in the direct influence of the stars upon human destinies, the astrological and mathematical fictions, which arose upon those conceptual presuppositions, have also disappeared.

Those who have seen errors or sketches of truth in conceptual fictions have certainly seen something: because (without incidentally anticipating at this point the theory of errors, or that of sketches or aids to the search for truth) it may at once be admitted, that conceptual fictions also sometimes become both errors and obstacles, and suggestions and aids to truth. But because a given spiritual product is adopted for an end different from that which rightly belongs to it (thereby becoming itself different and giving rise to a new spiritual product), we must not omit to search for the intrinsic end, which constitutes the genuine nature of this product. The portrait of a fair lady, white as milk and red as blood, which the prince of the story finds beneath a cushion by the help of the fairy, may serve as an incentive to make him undertake the journey round the world in search of the woman in flesh and blood, who is like the portrait and whom he will make his wife; but that portrait, before it is an in-

strument in the hands of the fairy, is a picture, that is to say, a work of art, which has come from the hands, or rather from the fancy, of the painter; and must be appreciated as such. Thus conceptual fictions, before they are transmuted into errors or into expedients, into obstacles or into aids to the search for truth, have, before them, a truth already constructed, toward the construction of which, therefore, they cannot serve; whereas that truth has served them, for they would not otherwise have been able to arise. They are, therefore, intrinsically neither obstacles nor aids to truth, but something else, that is, themselves; and what they are in themselves it is still necessary to determine.

Practical character of conceptual fictions.

For this purpose it is needful to direct our attention to the moment of their formation, which, as has been said, is not at all theoretical, but practical; and to ask ourselves in what way and with what end the practical spirit can intervene in representations and concepts previously produced, manipulate them and make of them conceptual fictions. The view that the work of the practical spirit can give rise to new knowledge, not previously attained, must be resolutely excluded: the practical spirit is such, precisely

because it is non-cognitive; as regards knowledge it is altogether sterile. If, then, it accomplishes those manipulations, and says to a cat: "You will represent for me all cats"; or to a rose: "See, I draw you in my treatise on botany, and you will represent all roses"; and to the triangle: "It is true I cannot think you, nor represent you; but I suppose that you are the same as what I draw with rule and compass, and I make use of you to measure the approximate triangles of reality";—in so doing, it recognizes that it does not accomplish any act of *knowledge*. But does it, in that case, accomplish an act of *anti-knowledge*? that is, does it make these manipulations and fictions in order to place obstacles in the way of knowledge and to simulate its products, so that it leads astray the seeker for truth? If this were so, the "practical spirit" would be synonymous with the spirit of confusion; and the contriver of conceptual fictions would deserve the reprobation that attaches to forgers of documents, sophists, rhetoricians, and charlatans; whereas, on the contrary, he receives the applause and gratitude of every one. Each one of us, at every instant, would be guilty of a plot against the truth, because at every instant each of us forms and employs those fictions;

whereas the moral consciousness, delicate and intolerant though it be, makes no reproof, but indeed offers encouragement. Therefore, the act of forming intellectual fictions is an act neither of knowledge nor of anti-knowledge; it is not logically rational, but neither is it logically irrational; it is rational, indeed, but *practically* rational.

The practical end and mnemonic utility.

In this case the practical end in view can be but one. We know in order to act; and he who acts is interested only in that knowledge, which is the necessary precedent of his doing. But since our knowledge is all destined to be recalled as occasion serves for action, or to aid us in the search for new knowledge (which in this case is a form of acting), the practical spirit is impelled to provide for the preservation of the patrimony of acquired knowledge. Without doubt, speaking absolutely, everything is preserved in reality, and nothing that has once been done or thought, disappears from the bosom of the cosmos. But the preservation of which we speak, is properly the making easily available to memory, knowledge that has once been possessed, and providing for its ready recall from the bosom of the cosmos or from the apparently unconscious and forgotten. For this

purpose there are constructed those instruments, which are conceptual fictions, by means of which armies of representations are evoked with a single word, or by which a single word approximately indicates what form of operation must be resorted to, in order that certain representations may be recovered. The cat of the appropriate conceptual fiction does not enable us to know any single cat, as a painter or a historian of cats makes us know it; but by means of it, many images of animals, which would have remained separate before the memory, or each one dispersed and fused in the complete picture in which it had been imagined and perceived, are arranged in a series and recorded as a whole. This matters little or nothing to one who dreams as a poet or who seeks absolute truth; but it matters a great deal to one whose house is infested by rats, and who must employ some one to obtain a cat; and it matters not less to the seeker for the cat, in that he has to study a new animal, and that he must proceed in that study with some order, though it be artificial, and though he reject the artifice in the final synthesis. Again, the geometrical triangle is of no service either to imagination or to thought, which are developed without it;

but it is indispensable to any one measuring a field, in the same way as it may possibly be of service to a painter in his preparatory studies for a picture, or to a historian, who wishes to know well the configuration of a piece of ground where a battle was fought.

Persistence of conceptual fictions side by side with concepts.

This is the real reason why, however perfect rigorous concepts become, conceptual fictions remain ineliminable, and indeed obtain from these fresh nourishment. They cannot be criticized and resolved by means of rigorous concepts, because they are of a different order from them: they cannot act as inferior degrees of the rigorous concept, because they presuppose it. The reason, which we were pledged to give, is given; and henceforward there can no longer arise any misunderstanding as to the relation of the concept to conceptual fictions. It is a relation not of identity, nor of contrariety, but simply of diversity.

Pure concepts and pseudo-concepts.

The terminological question remains, and this, as always, has but slight importance. "Conceptual fictions" is a manner of speech; and no one would wish to combat manners of speech. For brevity's sake we shall call them *pseudoconcepts*, and for the sake of clearness we shall call the true and proper concepts *pure*

concepts. This term seems to us more suitable than that of *ideas* (pure concepts), as opposed to *logical concepts* (pseudoconcepts), as they were at one time called in the schools. It must further be noted, that the pseudoconcepts, although the word "concept" forms part of their name, are not concepts, they do not form a species of, nor do they compete with, concepts (save when forcibly made to do so); and that the pure concepts have not got the impure concepts at their side, for these are not truly concepts. Every word offers, in some degree, a hold for misunderstanding, because it circulates in this base world, which is full of snares; the search for words which should absolutely prevent misunderstandings is vain, for it would be necessary first of all to clip the wings of the human spirit. We may prefer one word to another, according to historical contingencies; and for our part we prefer the words *pseudoconcept* and *pure concept*, if for no other reason than to remind the makers of fictional concepts to be modest, and to flash above their heads the light of the only true form of concept, which is logical nature itself in its universality and in its severity. How can we fail to think that the choice has been well made if this title

of *pure concept* please the few, but terrify the many and irritate the most, more than the red cloth shaken before the eyes of the bull; and if, like every efficacious medicine, it provoke a reaction in the organism of the patient?

III

THE CHARACTERISTICS AND THE CHARACTER OF THE CONCEPT

THE characteristics of the pure concept, or simply, concept, may be gathered from what has previously been said.

Expressivity. The concept has the character of *expressivity*; that is to say, it is a cognitive product, and, therefore, expressed or spoken, not a mute act of the spirit, as is a practical act. If we wish to submit the effective possession of a concept to a first test, we can employ the experiment which was advised on a previous occasion:—whoever asserts that he possesses a concept, should be invited to expound it in words, and with other means of expression (graphic symbols and the like). If he refuse to do so, and say that his concept is so profound that words cannot avail to render it, we can be sure, either that he is under the illusion of possessing a concept, when he possesses only turbid fancies and morsels of

ideas; or that he has a presentiment of the profound concept, that it is in process of formation, and will be, but is not yet, possessed. Each of us knows that when he finds himself in the meditative depth of the internal battle, of that true *agony* (because it is the death of one life and the birth of another), which is the discovery of a concept, he can certainly talk of the state of his soul, of his hopes and fears, of the rays that enlighten and of the shadows that invade him; but he cannot yet communicate his concept, which is not as yet, because it is not yet expressible.

Universality.

If this character of expressivity be common to the concept and to the representation, its *universality* is peculiar to the concept; that is to say, its transcendence in relation to the single representations, so that no single representation and no number of them can be equivalent to the concept. There is no middle term between the individual and the universal: either there is the single or there is the whole, into which that single enters with all the singles. A concept which has been proved not universal, is, by that very fact, confuted as a concept. Our philosophical confutations do not proceed otherwise. Sociology, for instance, asserts the con-

cept of *Society*, as a rigorous concept and principle of science; and the criticism of Sociology proves that the concept of society is not universal, but individual, and is related to the groupings of certain beings which representation has placed before the sociologist, and which he has arbitrarily isolated from other complexes of beings that representation also placed or could place before him. The theory of tragedy postulates the concept of the *tragic*, and from it deduces certain necessary essentials of tragedy; and the criticism of literary classes demonstrates that the tragic is not a concept, but a roughly defined group of artistic representations, which have certain external likenesses in common; and, therefore, that it cannot serve as foundation for any theory. On the other hand, to establish a universality, which at first was wanting, is the glory of truly scientific thought; hence we give the name of discoverers to those who bring to light connections of representations or of representative groups, or of concepts, which had previously been separate; that is to say, who universalize them. Thus, it was thought at one time that will and action were distinct concepts; and it was a step in progress to identify them by the creation of the truly universal concept of the will, which

is also action. Thus, too, it was held that expression in language was a different thing from expression in art; and it was an advance to universalize the expression of art by extending it to language; or that of language by extending it to art.

Not less proper to the concept is the other character of *concreteness*, which means that if the concept be universal and transcendent in relation to the single representation, it is yet immanent in the single, and therefore in all representations. The concept is the universal in relation to the representations, and is not exhausted in any one of them; but since the world of knowledge is the world of representations, the concept, if it were not in the representations, would not be anywhere: it would be in *another* world, which cannot be thought, and therefore is not. Its transcendence, therefore, is also immanence; like that truly literary language that Dante desired, which, in relation to the speech of the different parts of Italy, *in qualibet redolet civitate nec cubat in ulla.* If it is proved of a concept that it is inapplicable to reality, and therefore is not concrete, it is thereby confuted as a true and proper concept. It is said to be an *abstraction*, it is not reality; *Concreteness.*

it does not possess *concreteness*. In this way, for example, has been confuted the concept of spirit as different from nature (abstract spiritualism); or of the good, as a model placed above the real world; or of atoms, as the components of reality; or of the dimensions of space, or of various quantities of pleasure and pain, and the like. All these are things not found in any part of the real, since there is neither a reality that is merely natural and external to spirit, nor an ideal world outside the real world; nor a space of one or of two dimensions; nor a pleasure or pain that is homogeneous with another, and therefore greater or less than another; and for this reason all these things do not result from concrete thinking and are not concepts.

The concrete universal, and the formation of the pseudo-concepts.

Expressivity, universality, concreteness, are then the three characteristics of the concept derived from the foregoing discussion. Expressivity affirms that the concept is a cognitive act, and denies that it is merely practical, as is maintained in various senses by mystics, and by arbitrarists or fictionists. Universality affirms that it is a cognitive act *sui generis*, the logical act, and denies that it is an intuition, as is maintained by the æstheticists, or a group of

intuitions, as is asserted in the doctrine of the arbitrarists or fictionists. Concreteness affirms that the universal logical act is also a thinking of reality, and denies that it can be universal and void, universal and inexistent, as is maintained in a special part of the doctrine of the arbitrarists. But this last point needs explanation, which leads us to enunciate explicitly an important division of the pseudoconcepts, which has hitherto been mentioned as apparently incidental.

Empirical pseudoconcepts and abstract pseudoconcepts.

The pseudoconcepts, falsifying the concept, cannot imitate it scrupulously, because, if they did, they would not be pseudoconcepts, but concepts; not imitations, but the very reality which they imitate. An actor who, pretending on the stage to kill his rival in love, really did so, would no longer be an actor, but a practical man and an assassin. If, therefore, with regard to the representations, and when preparing to form pseudoconcepts, we should think representations with that universality which is also the concreteness proper to the true concept, and with that transcendence which is also immanence (and is therefore called *transcendentalism*), we should form true concepts. This, indeed, often happens, as we can see in certain treatises which

mean to be empirical and arbitrary, and from which, *currente rota, non urceus, sed amphora exit.* Their authors, led by a profound and irrepressible philosophic sense, gradually and almost unconsciously abandon their initial purpose, and give true and proper concepts in place of the promised pseudoconcepts: they are philosophers, disguised as empiricists. In order to create pseudoconcepts, we must therefore begin by arbitrarily dividing into two the one supreme necessity of logic, immanent transcendence, or concrete universality, and form pseudoconcepts, which are *concrete* without being *universal*, or *universal* without being *concrete.* There is no other way of falsifying the concept; whoever wishes to falsify it so completely as to render the imitation unrecognizable, does not falsify, but produces it; he does not remain outside, but permits himself to be caught in its coils; he does not invent a practical attitude, but thinks. That one mode is therefore specified in two particular modes, of which examples have already been given in our analysis of the pseudoconcepts of the house, the cat, the rose, which are concrete without being universal; and of the triangle and of free motion, which are universal without being concrete. There is nothing left to do, therefore,

but to baptize them; selecting some of the many names that are applied, and often applied, sometimes to the one, sometimes to the other of the two forms, or indifferently to both, and giving to each of them a particular name, which will be constant in this treatise. We shall then call the first, that is to say, those which are concrete and not universal, *empirical* pseudoconcepts; and the second, or those which are universal and not concrete, *abstract* pseudoconcepts; or, taking as understood for brevity's sake, the general denomination (pseudo), *empirical concepts* and *abstract concepts*.

The other characteristics of the pure concept.

Thus, of the three characteristics of the concept which we have exhibited, the second and the third constitute, as we can now see, one only, which is stated in a double form, solely in order to deny and to combat these two one-sided forms which we have called empirical and abstract concepts. But, on the other hand, it is easy to see that the characteristics of the concept are not exhausted in the two that remain, namely, in expressivity or cognizability, and in transcendence or concrete universality. Others can reasonably be added, such as *spirituality*, *utility*, *morality*, but we shall not dwell upon these, because either they belong to the general assumption

of Logic, that is, to the fundamental concept of Philosophy as the science of spirit, or they are more conveniently made clear in the other parts of this Philosophy. The concept has the character of spirituality and not of mechanism, because reality is spiritual, not mechanical; and for this reason we have to reject every mechanical or associationist theory of Logic, just as we have to reject similar doctrines in Æsthetic, in Economic and in Ethic. A special discussion of these views seems superfluous, because they are discussed and negated, that is to say, surpassed, in every line of our treatise. The concept has the character of utility, because, if the theoretic form of the spirit be distinct from the practical, it is not less true, by the law of the unity of the spirit, that to think is also an act of the will, and therefore, like every act of the will, it is teleological, not antiteleological; useful, not useless. And, finally, it has the character of morality, because its utility is not merely individual, but, on the contrary, is subordinated to and absorbed in the moral activity of the spirit; so that to think, that is, to seek and find the true, is also to collaborate in progress, in the elevation of Humanity and Reality, it is the denial and overcoming of one-

self as a single individual, and the service of God.

The origin of the multiplicity and unity of character of the concept.

Certainly, the form in which the order of our discourse has led us to establish the characters of the concept—that of enumeration, the one character being connected with the other by means of an "also"—is, logically, a very crude form, and must be refined and corrected. Above all, if we have spoken of *characters* of the concept, we have done so in order to adhere to the usual mode of expression. The concept cannot have characters, in the plural, but *character*, that one character which is proper to it. What this is has been seen; the concept is concrete-universal: two words which designate one thing only, and can also grammatically become one: "transcendental," or whatever other word be chosen from those already coined, or that may be coined for the occasion. The other determinations are not *characters* of the concept, but affirm its *relations* with the spiritual activity in general, of which it is a special form, and with the other special forms of this activity. In the first relation, the concept is spiritual; in relation with the æsthetic activity, it is cognitive or expressive, and enters into the general theoretic-expressive form; in relation with the practical activity, it is

not, as concept, either useful or moral, but as a concrete act of the spirit it must be called useful and moral. The exposition of the characters of the concept, correctly thought, resolves itself into the compendious exposition of the whole Philosophy of spirit, in which the concept takes its place in its unique character, that is to say, in itself.

Objections relating to the unreality of the pure concept and to the impossibility of demonstrating it.

This declaration may save us from the accusation of having given an empirical exposition of the non-empirical *Concept of the concept*, and so committing an error for which logicians are justly reproved (for they have often believed themselves to possess the right of treating of Logic without logic; perhaps for the same reason that custodians of sacred places are wont, through over-familiarity, to fail in respect towards them). But it lays us open to censure very much more severe; which, if it ultimately prove to be inoffensive, is certainly very noisy and loquacious. The pretended characters of the concepts (it is said) are, by your own confession, nothing but its relations with the other forms of the spirit; and the one character proper to it is that of universality-concreteness, that is, of being itself, since the "concrete-universal" is synonymous with the concept, and

vice versa. So it turns out that in spite of all your efforts, your concept of the concept becomes dissipated in a tautology. Give us a demonstration of what you affirm, or a definition which is not tautologous; then we shall be able to form some sort of an idea of your pure concept. Otherwise you may talk about it for ever, but for us it will always be like "Phœnician Araby" of Metastasian memory: "you say *that it is*; *where it is*, no one knows."

Prejudice relating to the nature of demonstration.

Beneath such dissatisfaction and the claim it implies, we find first of all a prejudice of scholastic origin concerning what is called *demonstration.* That is to say, it is imagined that demonstration is like an irresistible contrivance, which grasps the learner by the neck and drags him willy-nilly, whither he does not and the teacher does will to go, leaving him open-mouthed before the truth, which stands external to him, and before which he must, *obtorto collo*, bow himself. But such coercive demonstrations do not exist for any form of knowledge—indeed, for any form of spiritual life—nor is there a truth outside our spirit. Not that truth presupposes *faith*, as is often said, so that rationality is subordinated to some unknown form of irrationality; but *truth is faith*, trust in oneself, certainty

of oneself, free development of one's inner powers. The light is in us; those sequences of sounds, which are the so-called demonstration, serve only as aids in discarding the veils and directing the gaze; but in themselves they have no power to open the eyes of those who obstinately wish to keep them closed. Faced with this sort of reluctance and rebellion, the pedagogues of the good old days had recourse, as we know, not to demonstrations, but to the stool of penitence and to the stick; so fully were they persuaded that the demonstration of truth requires good dispositions, *i.e.* requires those who are disposed to fall back upon themselves and to look into themselves. How can the beauty of the song of Farinata be demonstrated to one who denies it, and will neither appreciate the soul contained in that sublime poem, nor accomplish the work necessary to attain to the possibility of such an appreciation, nor will, on the other hand, humbly confess his own incapacity and lack of preparation,—how can we forcibly demonstrate to him that that song is beautiful? The critical wisdom of Francesco de Sanctis would be disarmed and impotent before such a situation. How can we demonstrate to one who deliberately refuses to believe in any authority or document, and breaks

the tradition by which we are bound to the past, that Miltiades conquered at Marathon, or that Demosthenes strove all his life against the power of Macedonia? He will capriciously throw doubt on the pages of Herodotus and the orations of Demosthenes; and no reasoning will be able to repress that caprice. What more can be said? Even in arithmetic, for which calculating machines exist, compulsory demonstration is impossible. In vain you will lift two fingers of the hand, and then the third and the fourth, in order to demonstrate to one who does not wish for demonstration that two and two are four; he will reply that he is not convinced. And indeed he cannot be convinced, if he do not accomplish that inner spiritual synthesis by which twice two and four reveal themselves as two names of one and the same thing. Therefore, he who awaits a compelling demonstration of the existence of the pure concept, awaits in vain. For our part, we cannot give him anything but that which we are giving: a discourse, directed towards making clear the difficulties, and towards demonstrating how, by means of the pure concept, all problems concerning the life of the spirit are illuminated, and how, without it, we cannot understand anything.

Prejudice concerning the representability of the concept.

But another prejudice, perhaps yet more tenacious than the first, accompanies this extravagant idea about demonstration. Accustomed as men are to move among things, to see, to hear, to touch them, while hardly or only fugitively reflecting upon the spiritual processes which produce that vision, hearing and touching; when they come to treat of a philosophic question, and to conceive a concept (and especially when it is necessary to conceive precisely the concept of the concept), they do not know how to refrain from demanding just that which they have been obliged to renounce in their new search, and which they have already renounced, owing to the very fact of their having entered into it: the representative element, something that they can see, hear and touch. It is almost as though a novice, on entering a monastery, and having just pronounced the solemn vow of chastity, should ask, as his first request upon taking possession of his cell, for the woman who is to be his companion in that life. He will be answered that in such a place his spouse cannot be anything but an ideal spouse, holy Religion or holy Mother Church.

All philosophers have been compelled to protest against the request, which they have had

addressed to them, for an impossible external demonstration and for something representative in a field where representation has been surpassed. *Protests of the philosophers against this prejudice.*

"In our system (said Fichte) we must *ourselves* lay the *foundation* of our own philosophy, and consequently that system must seem to be without foundation to one who is incapable of accomplishing that act. But he may be assured beforehand that he will never find a foundation elsewhere, if he do not lay such an one for himself, or remain not satisfied with it. It is fitting that our philosophy should proclaim this in a loud voice, in order that it may be spared the pretence of demonstrating to mankind from *without* what they must create in themselves."[1] Schelling appropriately compared philosophic obtuseness with æsthetic obtuseness: "There are two only ways out of common reality. Poetry, which transports you into an ideal world, and Philosophy, which makes *the real world disappear altogether from our sight.* One does not see why the sense for Philosophy should be more generally diffused than that for Poetry."[2] And Hegel, giving explanations which precisely meet the present case, says: "What is called the *incomprehensibility* of

[1] *System de Sittenlehre* (in *Sammtl. Werke*), iv. p. 26.
[2] *Idealismo transcendentale*, trad. Losacco, p. 19.

Philosophy, arises, in part, from an incapacity (in itself only a lack of habit) to think abstractly, that is to say, to hold pure thoughts firmly before the spirit and to move in them. In our ordinary consciousness, thoughts are clothed in and united with ordinary sensible and spiritual matter; and in our rethinking, reflecting and reasoning we mingle sentiments, intuitions and representations with thoughts: in every proposition whose content is entirely sensible (for example: this leaf is green) there are already mingled categories, such as being and individuality. But it is quite another thing to take as our object thoughts by themselves, without any admixture. The other reason for its incomprehensibility is the impatience which demands to have before it as representation that which in consciousness appears only as thought and concept. And we hear people say that they do not know what there is *to think* in a concept, which is already apprehended; whereas *in a concept there is nothing to be thought but the concept itself.* But the meaning of this saying is just that they want a familiar and ordinary *representation.* It seems to consciousness as if, with the removal from it of the representation, the ground had been removed which was its firm and habitual support. When transported into the

pure region of the concepts, it no longer knows *what world it is in.* For this reason, those writers, preachers and orators are esteemed marvels of *comprehensibility* who offer their readers or hearers things which they already know thoroughly, things which are familiar to them and which are *self*-evident."[1]

Reason for their perpetual recurrence.

Thus have all philosophers protested, and thus will all protest still, from age to age, because that intolerance, that immobility, that recalcitrance before the very painful effort of having to abandon the world of sense (though but for a single instant, and in order to reconquer and to possess it more completely) will perpetually be renewed. They are the birth-pangs of the Concept, to escape which no plans for virginity and no manœuvres to procure abortion are of any avail. They must be endured, because that law of the Concept ("thou shalt bring forth in suffering") is also a law of life.

[1] *Encyclopædia*, Croce's translation, § 3, Observations.

IV

DISPUTES AS TO THE NATURE OF THE CONCEPT

Disputes of materialistic origin.

DISPUTES as to the nature of the concept have sometimes had their origin (notably in the recent period of philosophic barbarism, which "renews the fear of thought," whence we have with difficulty emerged) in materialistic, mechanical and naturalistic prejudices. Therefore, as already mentioned, discussion has arisen as to whether the concept should be considered logical or psychological, as the product of synthesis or of association, or of individual or hereditary association. But these are controversies which, for the reasons we gave before, we shall not spend time in illustrating.

The concept as value.

Nor shall we pay attention to the other controversy, as to whether concepts are *values or facts*, whether they operate only as *norms* or also as *effective forces* of the real; because the division between values and facts, between norms and effective existence (between *Gelten* and *Sein*, as

it is expressed in German terminology), is itself surpassed and unified, implicitly and explicitly, in all our philosophy. If the concept or thought has value, it can have value only because it *is*; if the norm of thought operate as a norm, that implies that it is thought itself, its own norm, a constitutive element of reality. There is not to be found in any form of spiritual life any value which is not also reality—not in art, where there is no other beauty than art itself; nor in morality, where no other goodness is known than action itself directed to the universal; nor in the life of thought. The concept has value, because it is; and is, because it has value.

Realism and nominalism.

But the greater part of these dissensions, which have existed for centuries and are yet living, rests on the confusion between concepts and pseudoconcepts, and the consequent pretension to define the concept by denying one or other of these two forms. This is the origin of the two opposite schools of *realists* and *nominalists*, which are also called in our times rationalists and empiricists (arbitrarists, conventionalists, fictionists). The realists maintain that concepts are real: that they correspond to reality; the nominalists, that they are simple names to designate representations and groups of repre-

sentations, or, as is now said, tickets and labels placed upon things in order to recognize and find them again. In the former case, no elaboration of representations higher than the universalizing act of the concept is possible; in the latter, the only possible operation is that which has already been described—mutilation, reduction and fiction, directed to practical ends.

Critique of both.

The consequence of these one-sided affirmations has been that the realists have defined as concepts, and therefore as having a universal character, all sorts of rough pseudoconcepts; not only the horse, the artichoke and the mountain, but also, logically, the table, the bed, the seat, the glass, and so on; and they have exposed themselves from the earliest beginnings of philosophy to the sarcastic and irresistible objection that the horse exists, but not horsiness, the table, but not tabularity. This conceptualization of pseudoconcepts is the error of which they have really been guilty, not that of conferring empirical reality on the concepts by placing them as single things alongside of other things, an extravagance which it is doubtful if any man of moderate sense has ever seriously committed. The realists who rendered the concepts real in this sense at the same time rendered them un-

real, that is to say, single and contingent, and in need of being surpassed by true concepts. The nominalists, on the other hand, considered as arbitrary and mere names all the presuppositions of their mental life—being and becoming, quality and final cause, goodness and beauty, the true and the false, the Spirit and God. Without being aware of it, they have fallen into inextricable contradictions and into logical scepticism.

True realism.

It is henceforth clear that this secular dispute cannot be decided in favour of one or other of the contending parties, for both are right in what they affirm and wrong in what they deny, that is, both are right and wrong. The two forms of spiritual products, of which each of those schools in its affirmations emphasizes only one, both actually exist; the one is not in antithesis to the other, as the rational is to the irrational. The true doctrine of the concept is realism, which does not deny nominalism, but puts it in its place, and establishes with it loyal and unequivocal relations.

Solution of other difficulties concerning the genesis of concepts.

By establishing such relations we emerge from the vicious circle, which has given such trouble to certain logicians, who have striven to explain the genesis of the concepts in terms of nominalism, but were afterwards, when probing

their doctrine to the bottom, compelled to admit the *necessity of the concepts* as a *foundation* for the *genesis of the concepts*. They believed that they had got out of the difficulty by distinguishing two orders of concepts, primary and secondary, formative models and formations according to models; and they thus reproduced, in the semblance of a solution, the problem still unsolved. In different words, others admitted the same embarrassment. They attempted to obtain the concepts from *experience*, but recognized at the same time that all experience presupposes an *ideal anticipation*. Or they declared that the concept fixes the *essential* characters of things, and, at the same time, that the essential characters of things are indispensable for fixing the *concept*. Or, finally, they based the formation of concepts upon *categories*, which, enumerated and understood as they understood them, were by no means categories and functions, but *concepts*. Primary concepts, formative models, ideal anticipations, essential concepts, concept-categories, and the like, are nothing but verbal variants of the pure concepts; the necessary presupposition, as we know, for the impure concepts or pseudoconcepts.

Other disputes, far enough apart in significance and nature, concerning the nature of the concept,

acquire a more precise meaning when referred to our subdivision of pseudoconcepts into *empirical* or *representative*, and *abstract*. Thereby we can understand why it has been asked if the concepts are *concrete* or *abstract*, *general* or *universal*, *contingent* or *necessary*, *approximate* or *rigorous*; if they are obtained *a posteriori* or *a priori*, by *induction* or *deduction*, by *synthesis* or *analysis*, and so on. This series of disputes likewise cannot be settled, save by admitting that both contending parties are right and wrong, and demonstrating that pseudoconcepts (which are alone here in discussion) are constructed by analysis, and by deduction are *a priori*, and have the characters of abstractness, rigorousness, universality and necessity, if it be a question of *abstract* pseudoconcepts, that is to say, of empty fictions, outside experience; while, on the other hand, they are constructed by synthesis, and by induction are *a posteriori*, and have the characters of concreteness, approximation, mere generality and contingency, if they be empirical or *representative* pseudoconcepts, that is to say, groups of representations, which do not go beyond representation and experience. Indeed, from this last point of view, no error was made in denying any difference between the (representative)

Disputes arising from neglect of the distinction between empirical and abstract concepts.

concept and the *general representation.* It is false that this latter is the result of psychical mechanism or association, and the former of psychical purpose, because there is nothing mechanical in the spirit; and the general representation, if it is a product of the spirit, is as teleological as the other, indeed is absolutely one with the other. It obeys, like it, the law of *economy*, or, as we have shown, the practical ends of convenience and utility.

Crossing of the various disputes.

But these last disputes have crossed with that which we first examined between realism and nominalism, and have sometimes taken on the same meaning. This must be kept in mind, to serve as a guide in the dense forest. Is the concept *a priori* or *a posteriori*, universal or general, necessary or contingent? These questions and others like them were sometimes understood as equivalent to the question: is it real or nominal, truth or fiction?

Other logical disputes.

Certain problems of Logic, not yet solved in a satisfactory manner, arise from the failure to make clear the confusion between concepts and pseudoconcepts, and between empirical and abstract concepts. Is it or is it not true that every concept must have an individual representation, taken from its own sphere, as a

necessary *support*? Are concepts of *things* possible, or is there a special concept corresponding to every thing? Is a concept of the *individual* possible? These three questions may be answered in the affirmative, in the negative, and in the affirmative-negative, according as they are referred to the empirical concept, the abstract concept, or the pure concept.

The representative accompaniment of the concept.

For, if we consider the first question, we must resolutely deny that the abstract concept has any need of a particular representation as its necessary support. The geometric triangle, as such, is neither white nor black, nor of any given size; if the representation of a particular triangle unites itself to it, geometry discards it. But we must just as resolutely affirm than an empirical or representative concept has always an image to support it; the concept of a cat needs the image of a cat, and every book on zoology is accompanied with illustrations. The image may be varied, but never suppressed; and it may be varied only within certain limits, because, if these be exceeded, the concept itself loses its form and is dissipated. Thus, for the concept of the cat, we could frame a representation of a white or black or red cat, or a small or big one; but if scarlet colour or the size of an elephant be

attributed to the cat, which serves as symbol of the fiction, the concept must be changed. That concept has at its command the images of cats, upon which it has been formed, which, as we know, are always finite in number. Finally, with reference to the pure concept, it must be said that every image and no image is in turn a symbol of it; as every blade of grass (as Vanini said) represents God, and a number of images, however great it be, does not suffice to represent Him.

The concept of the thing and the concept of the individual.

In like manner, as regards the second question, it must be answered that the empirical concept is nothing but a concept of things, or a grouping of a certain number of things beneath one or other of them, which functions as a type; that the abstract concept is by definition, the not-thing, incapable of representation; and that the pure concept is a concept of every thing and of no thing. And as regards the third, we must answer that the abstract concept is altogether repugnant to individuality; the pure concept alights upon every individual, only to leave it again, and in so far as it thinks all individual things, it renders them all, in a certain way, concepts, and in so far as it surpasses them, it denies them as such; while the empirical concept

can be the *concept of the individual.* Because if in reality, the individual be the situation of the universal spirit at a determinate instant, empirically considered the individual becomes something isolated, cut off from the rest and shut up in itself, so that it is possible to attribute to it a certain constancy in relation to the occurrences of the life it lives; so that that life assumes almost the position of the individual determinations of a concept. Socrates is the life of Socrates, inseparable from all the life of the time in which he developed; but empirically and usefully we can construct the concept of a Socrates a controversialist, an educator, endowed with imperturbable calm, of which the Socrates who ate and drank and wore clothes, and lived during such and such occurrences, is the incarnation. Thus we can form pseudoconcepts of individuals as well as of things, or, to express it in terms that are the fashion, we can form *Platonic ideas* of them.

Reasons, laws, and causes.

It is also well to note that to adduce the *reasons*, the *laws*, the *causes* of things and of reality, is equivalent to establishing concepts, and since the word "concepts" has been applied in turn to pure and to empirical and abstract concepts, laws and causes have been alternately described as truths and as fictions. It belongs

to the discussion of terminology to remark that in general the word "reason" has been used only for researches into pure and abstract concepts, "cause" for empirical concepts, and "laws" almost equally for all three, but perhaps a little more for empirical and abstract than for pure concepts. But to the confusion of these three forms of spiritual products is to be attributed the fact that there have been discussions, as, for instance, whether there be *concepts of laws* in addition to concepts of things, the issue of which was at bottom the desire to ascertain whether there exist abstract and pure concepts, in addition to empirical concepts.

Intellect and Reason.

The profound diversity of the concepts and of the pseudoconcepts suggested (at the time when it was customary to represent the forms or grades of the spirit as faculties) the distinction between two logical faculties, which were called *Intellect* (or, also, *abstract* Intellect), and *Reason*. The first of these formed what we now call pseudoconcepts; the second, pure concepts.

The abstract intellect and its practical nature

But the proper character of neither of the two faculties was realized by those who postulated them; they fell into the error, which we have already had occasion to criticize, of conceiving the Intellect as a form of knowledge, which

either lives in the false, or is limited to preparing the material for the superior faculty, to which it supplies a first imperfect sketch of the concept. But the faculty required for this should be, not of a theoretical nature, but of a practical. It is a terminological question of slight interest, whether the name "Intellect" should be retained for the production of pseudoconcepts, or whether the purely theoretic meaning, which it first had, should be restored to it, and it should thus be made synonymous with "Reason." It can only be observed that it will be very difficult to remove henceforth from "Intellect," from "intellectual formations," and from "intellectualism," the suspicion and discredit cast upon them by the great philosophic history of the first half of the nineteenth century; so much so, that only where a rather popular style is employed, can Intellect and Reason be used promiscuously.

With greater truth, Reason was considered as unifying what the Intellect had divided, and therefore as unifying abstraction and concreteness, deduction and induction, analysis and synthesis. With greater truth, although complete exactness would have demanded here, not so much that to Reason should be given the power of unifying what has been unduly divided, as that to the

Intellect, that is to say, to the practical faculty, should be given the power of dividing extrinsically what for Reason is never divided: a power which the Intellect, as a practical faculty, possesses and exercises, not in a pathological, but in a physiological way.

The synthesis of theoretic and practical, and the intellectual intuition.

The incomplete survey of the so-called Intellect, the theoretic character of which was preserved, though in a depreciatory sense, issued in the result that finally to Reason itself was attributed a character, no longer theoretic, or rather, *more than theoretic.* Knowledge, presenting itself in the form of Intellect, seemed inadequate to truth; to attain to which there intervened Reason, or speculative procedure, the *synthesis of theory and practice*, a knowledge which is action, and an action which is knowledge. Sometimes, Reason itself, thus transfigured, seemed insufficient, owing to the presence of ratiocinative processes, which came to it from the Intellect, and were absorbed by it; and the supreme faculty of truth was conceived, not as logical reasoning, but as intuition; an intuition differing from the purely artistic and revealing the genuine truth, an organ of the absolute, *intellectual Intuition.* It was urged against intellectual intuition that it created irresponsibility

in the field of truth, and made lawful every individual caprice. But a similar objection could be brought against Reason, which is superior to knowledge, and is the synthesis of theory and practice : while, on the other hand, it cannot be denied, both of intellectual Intuition and of Reason, that on the whole they affirmed or tended to affirm *the rights of the pure Concept*, as opposed to empirical and abstract concepts.

Uniqueness of thought.

For our part, we have no need to lower the cognitive activity beneath the level of truth, by attributing to it an intellectualistic and arbitrary function; nor, on the other hand (in order to supplement knowledge and intellect thus pauperized), to exalt Reason above itself. Thought (call it Intellect, or Reason, or what you will) is always thought ; and it always thinks with pure concepts, never with pseudoconcepts. And since there is not another thought beneath thought, so there is not another thought superior to it. The difficulties which led to these conclusions have been completely explained, when we have distinguished concepts from pseudo-concepts, and demonstrated the heterogeneity which exists between these two forms of spiritual products.

V

CRITIQUE OF THE DIVISIONS OF THE CONCEPTS AND THEORY OF DISTINCTION AND DEFINITION

The pseudo-concepts, not a subdivision of the concept.

PRECISELY because they are heterogeneous formations, pure concepts and pseudoconcepts do not constitute divisions of the generic concept of the concept. To assume that they did, would be a horrible confusion of terms, not far different (to use Spinoza's example) from that of the division of the dog into *animal* dog and *constellation* dog; though poets used at one time to talk of the celestial dog also, as "barking and biting," when the sun implacably burned the fields.

Obscurity, clearness and distinction, not subdivisions of the concept.

And seeing that our point of view is philosophic, we can take no account of another division of the concept, which had great fame and authority in the past: that into *obscure*, *confused*, *clear* and *distinct* concepts and the like, or of the degrees of *perfection* to which the concept attains. Such a division can retain at the most but an empirical and approximate value,

and under this aspect it will be difficult altogether to renounce it in ordinary discourse; but it has no logical and philosophic value whatever. The concept is what is truly concept, the perfect concept, not at all the encumbered or wandering tendency toward it. Yet that division had great historical importance. By means of it, indeed, the attempt was made to differentiate the concept, under the name of *clear* and *distinct* thought, from the intuition, which was *clear* but *confused* thought, and both of these from sensation, impression, or emotion, which was called *obscure*. This was attempted, but without success; the problem was set but not solved; for the solution was only attained when it was seen that, in this case, it was not a question of three degrees of thought, as absolute logic claimed, but of three forms of the spirit: of thought or *distinction*, of intuition or *clearness*; and of the practical activity, *obscurity* or *naturality*.

Non-existence of subdivisions of the concept as a logical form.

Logically, the concept does not give rise to distinctions, for there are not several forms of concept, but one only. This is a perfectly analogous result in Logic to that which we reached in Æsthetic, when we established the uniqueness of intuition or expression, and the non-existence of special modes or classes of expressions (except in the

empirical sense, in which we can always establish as many classes as we wish). In distinguishing the forms of the spirit, the two principal forms, theoretic and practical, having been divided, and the theoretic having been subdivided into intuition and concept, there is no place for a further subdivision of the theoretic forms, since intuition and concept are each of them indivisible forms. The reason for this indivisibility cannot be clearly understood, save by the complete development of the Philosophy of the spirit; and it is only to be remarked here in passing, that the division of intuition and concept has as its foundation the distinction between individual and universal. And since in this distinction there is no *medium quid* nor an *ulterius*, a third or fourth intermediate form, so there is no subdivision; since we pass from the concept of individuality to single individuality, which is not a concept, and from the concept of the concept to the single act of thought, which is no longer the simple definition of logical thinking, but effective logical thinking itself.

The distinctions of the concept not logical, but real.

Since all subdivision of the logical form of the concept has been excluded, the multiplicity of concepts can be referred only to the variety of the objects, which are thought in the logical form of the concept. The concept of *goodness*

is not that of *beauty*; or rather, both are logically the same thing, since both are logical form; but the aspect of reality designated by the first is not the same aspect of reality as is designated by the second.

Multiplicity of the concepts, and the logical difficulty arising therefrom. Necessity of overcoming it.

But here arises the difficulty. How can it be that since in the concept we deal with reality, in its universal aspect, we yet obtain so many various forms of reality, that is, so many distinct concepts (for example, passion, will, morality, imagination, thought, and so on), so many *universals*, whereas the concept should give us *the universal.* If this variety were not overcome or capable of being overcome by the concept, we should have to conclude that the true universal is not attainable by thought, and to return to scepticism, or at least to that peculiar form of logical scepticism which makes the consciousness of unity an act of the inner life, which cannot be stated in terms of logic; that is, mysticism. The distinction of the concepts, one from another, in the absence of unity, is separation and atomism; and it would certainly not be worth while getting out of the multiplicity of representations if we were then to fall into that of the concepts. For this, no less than the other, would issue in a *progressus ad infinitum*,

for who would ever be able to affirm that the concepts which were discovered and enumerated were all the concepts? If they be ten, why should they not be, if better observed, twenty, a hundred, or fifty thousand? Why, indeed, should they not be just as numerous as the representations, that is to say, infinite? Spinoza, who counted, without mediating between them, two attributes of substance, thought and extension, admitted, with perfect coherence, that two are known to us, but that the attributes of Substance must in reality be considered infinite in number.

Impossibility of eliminating it.

The concept, then, demands that this multiplicity be denied; and we can affirm that the real is one, because the concept, by means of which alone we know it, is one; the content is one, because the form of thought is one. But in accepting this claim, we run into another difficulty. If we jettison distinction, the unity that we attain is an empty unity, deprived of organic character, a whole without parts, a simple *beyond* the representations, and therefore inexpressible; so that we should return to mysticism by another route. A whole is a whole, only because and in so far as it has parts, indeed *is* parts; an organism is such, because it has and is organs and functions; a unity is thinkable only

in so far as it has distinctions in itself, and is the unity of the distinctions. Unity without distinction is as repugnant to thought as distinction without unity.

Unity as distinction.

It follows, therefore, that both terms are reciprocally indispensable, and that the distinctions of the concept are not the negation of the concept, nor something outside the concept, but the concept itself, understood in its truth; the *one-distinct*; one, only because distinct, and distinct only because one. Unity and distinction are correlative and therefore inseparable.

Inadequateness of the numerical concept of multiplicity.

The distinct concepts, constituting in their distinction unity, cannot, above all, be infinite in number, for in that case they would be equivalent to the representations. Not indeed that they are finite in number, as if they were all alike equally arranged upon one and the same plane, and capable of being placed in any other sort of order, without alteration in their being. The *Beautiful*, the *True*, the *Useful*, the *Good*, are not the first steps in a numerical series, nor do they permit themselves to be arranged at pleasure, so that we may place the beautiful after the true, or the good before the useful, or the useful before the true, and so on. They have a necessary order, and mutually imply

one another; and from this we learn that they are not to be described as finite in number, since number is altogether incapable of expressing such a relation. To count implies having objects separate from one another before us; and here, on the contrary, we have terms that are distinct, but inseparable, of which the second is not only second, but, in a certain sense, also first, and the first not only first, but, in a certain way, also second. We cannot dispense with numbers, when treating of these concepts of the spirit, owing to their convenience for handling the subject; hence we talk, for example, of the *ten* categories, or of the *three* terms of the concept, or of the *four* forms of the spirit. But in this case the numbers are mere *symbols*; and we must beware of understanding the objects which they enumerate, as though they were ten sheep, three oxen, and four cows.

Relation of the distinct concepts as ideal history.

This relation of the distinct concepts in the unity which they constitute, can be compared to the spectacle of life, in which every fact is in relation with all other facts, and the fact which comes after is certainly different from that which precedes, but is also the same; since the consequent fact contains in itself the preceding, as, in a certain sense, the preceding virtually con-

tained the consequent, and was what it was, just because it possessed the power of producing the consequent. This is called *history*; and therefore (continuing to develop the comparison) the relation of the concepts, which are distinct in the unity of the concept, can be called and has been called *ideal history*; and the logical theory of such ideal history has been regarded as the theory of the *degrees of the concept*, just as real history is conceived as a series of *degrees of civilization*. And since the theory of the degrees of the concept is the theory of its distinction, and its distinction is not different from its unity, it is clear that this theory can be separated from the general doctrine of the concept with which it is substantially one, only with a view to greater facility of exposition.

Distinction between ideal and real history.

Metaphors and comparisons are metaphors and comparisons and (like all forms of language) their effectiveness for the purposes of dissertation is accompanied, as we know, by the danger of misunderstanding. In order to avoid this, without at the same time renouncing the convenience of such modes of expression, it will be well to insist that the historical series, where the distinct concepts appear connected, is *ideal*, and therefore outside space and time, and eternal; so that it

would be erroneous to conceive that in any smallest fragment of reality, or in any most fugitive instant of it, one degree is found without the other, the first without the second, or the first and the second without the third. Here too, we must allow for the exigencies of exposition, whereby, sometimes, when we intend to emphasize the distinction, we are led to speak of the relation of one degree to another, as if they were distinct existences; as if the practical man really existed side by side with the theoretic man, or the poet side by side with the philosopher, or as if the work of Art stood separate from the labour of reflection, and so on. But if a particular historical fact can in a certain sense be considered as essentially distinct in time and space, the grades of the concept are not existentially, temporally, and spatially distinct.

Ideal and abstract distinction.

An opposite, but not less serious error, would be to conceive the grades of the concept as distinct only *abstractly*, thus making abstract concepts of distinct concepts. The abstract distinction is unreal; and that of the concept is real; and the reality of the distinction (since here we are dealing with the concept) is precisely *ideality*, not *abstraction*. The universal, and therefore also all the forms of the universal, are

found in every minutest fragment of life, in the so-called physical atom of the physicists, or in the psychical atom of the psychologists; the concept is therefore all distinct concepts. But *each one of them is, as it were, distinct in that union*; and in the same way as man is man, in so far as he affirms all his activities and his entire humanity, and yet cannot do this, save by specializing as a scientific man, a politician, a poet, and so on. In the same way the thinker, when thinking reality, can think it only in its distinct aspects, and in this way only he thinks it in its unity. A work of Art and a philosophical work, an act of thought or of will, cannot be taken up in the hand or pointed out with the finger; and it can be affirmed only in a practical and approximate sense that this book is poetry, and that philosophy, that this movement is a theoretic or practical, a utilitarian or a moral act. It is well understood that this book is also philosophy; and that it is also a practical act; just as that useful act is also moral, and also theoretic; and *vice versa*. But to think a certain intuitive datum and to recognize it as an affirmation of the whole spirit, is not possible save by thinking its different aspects distinctly. This renders possible, for example, a criticism of Art,

conducted exclusively from the point of view of Art; or a philosophical criticism, from the exclusive point of view of philosophy; or a moral judgment, which considers exclusively the moral initiative of the individual, and so on. And therefore, here as in the preceding case, it is needful to guard against forcing the comparison with history too far, and conceiving, in history, the possibility of divisions as rigorous as in the concept. If distinct concepts be not *existences*, existences are not *distinct* concepts; a fact cannot be placed in the same relation to another fact, as one grade of the concept to another, precisely because in every fact there are all the determinations of the concept, and a fact in relation to another fact is not a conceptual determination.

Certainly *distinct* concepts can become *simple abstractions*; but this only happens when they are taken in an abstract way, and so separated from one another, co-ordinated and made parallel, by means of an arbitrary operation, which can be applied even to the pure concepts. The distinct concepts then become changed into *pseudoconcepts*, and the character of abstraction belongs to these last, not to the distinct concepts as such, which are always at once distinct and united.

Other usual distinctions of the concept, and their meaning, identicals, disparates, primitives, and derivatives, etc.

This is not the place to dwell upon the other forms of concepts met with in Logic, known as *identical* concepts, which cannot be anything but synonyms, or words ;—or upon *disparate* concepts, which are simply distinct concepts, in so far as they are taken in a relation, which is not that given in the distinction, and is therefore arbitrary, so that the concepts, thus presented without the necessary intermediaries, appear disparate ;—or *primitive and derived concepts, or simple and compound concepts* ; a distinction which does not exist for the pure concepts, since they are always simple and primitive, never compound or derived.

Universals, particulars, and singulars. Intension and extension.

But the distinction of concepts into *universal*, *particular*, and *singular* deserves elucidation, for the reason that we are now giving. Concepts, which are only universal, or only particular, or only singular, or to which any one of these determinations is wanting, are not conceivable. Indeed, universality only means that the distinct concept is also the unique concept, of which it is a distinction and which is composed of such distinctions; particularity means that the distinct concept is in a determinate relation with another distinct concept; and singularity that in this particularity and in that universality it is also

itself. Thus the distinct concept is always singular, and therefore universal and particular; and the universal concept would be abstract were it not also particular and singular. In every concept there is the whole concept, and all other concepts; but there is also one determinate concept. For example, beauty is spirit (universality), theoretic spirit (particularity), and intuitive spirit (singularity); that is to say, the whole spirit, in so far as it is intuition. Owing to this distinction into universal, particular, and singular, it is self-evident that intension and extension are, as the phrase is, in inverse ratio, since this amounts to repeating that the universal is universal, the particular particular, and the singular singular.

Logical definition.

The interest of this distinction of universality, particularity, and singularity lies in this, that upon it is founded the doctrine of *definition*, since it is not possible to define, that is, to think a concept, save by thinking its *singularity* (peculiarity), nor to think this, save by determining it as *particularity* (relation with the other distinct concepts) and *universality* (relation with the whole). Conversely, it is not possible to think universality without determining its particularity and singularity; otherwise that universal would be empty.

The distinct concepts are defined by means of the one, and the one by means of the distinct. This doctrine, thus made clear, is also in harmony with that of the nature of the concepts.

Unity-distinction as circle.

But the theory of the distinct concepts and that of their unity still present something irrational and give rise to a new difficulty. Because, if it be true that the distinct concepts constitute an ideal history or series of grades, it is also true that in such a history and series there is a *first* and *last*, the concept *a*, which opens the series, and, let us say, the concept *d*, which concludes it. Commencement and end thus remain both without motive. But in order that the concept be unity in distinction and that it may be compared to an organism, it is necessary that it have no other commencement save itself, and that none of its single distinct terms be an absolute commencement. For, in fact, in the organism no member has priority over the others; but each is reciprocally first and last. Now this means that the symbol of *linear series* is inadequate to the concept; and that its true symbol is the *circle*, in which *a* and *d* function, in turn, as first and last. And indeed the distinct concepts, as eternal ideal history, are an eternal going and returning, in which *a*, *b*, *c*, *d* arise

from *d*, without possibility of pause or stay, and in which each one, whether *a* or *b* or *c* or *d*, being unable to change its place, is to be designated, in turn, as first or as last. For example, in the Philosophy of Spirit it can be said with equal truth or error that the end or final goal of the spirit is to know or to act, art or philosophy; in truth, neither in particular, but only their totality is the end; or only the Spirit is the end of the Spirit. Thus is eliminated the rational difficulty, which might be urged in relation to this part.

Distinction in the pseudo-concepts.

It is still better eliminated, and the whole doctrine of the pure concepts which we have been expounding is thereby illumined and thrown into clearer outline when we observe the transformation (which we will not call either inversion or perversion), to which it is submitted in the doctrine of the pseudoconcepts. It is therefore expedient to refer rapidly to this for the sake of contrast and emphasis.

Above all, certain distinctions, which in the doctrine of the pure concepts have been seen to be without significance or importance, find their significance in the doctrine of the pseudoconcepts. We understand, for instance, how and why *identical* concepts can be discussed; since, in the field of caprice, one and the same thing, or one

and the same not-thing, can be defined in different ways and give rise to two or more concepts which, owing to the identity of their matter, are thus identical. The concept of a figure having three angles, or that of a figure having three sides, are identical concepts, alike applicable to the triangle; the concept of 3×4 and that of 6×2 are identical, since both are definitions of the number 12; the concept of a feline domestic animal and that of a domestic animal that eats mice are identical, both being definitions of the cat. It is likewise clear how and why *primary* and *derived*, *simple* and *compound* concepts are discussed; for our arbitrary choice, by forming certain concepts and making use of these to form others, comes to posit the first as simple and primitive in relation to the second, which are, in their turn, to be considered as compound or secondary.

The subordination and co-ordination of the empirical concepts.

We have already seen that the arbitrary concept differs from the pure concept in that, of necessity, it produces two forms by the two acts of empiricism and emptiness and thereby gives rise to two different types of formations, empirical and abstract concepts. Empirical concepts have this property, that in them unity is outside distinction and distinction outside unity. And it is natural: for if it were the case that these

two determinations penetrated one another, the concepts would be, as we have already noted, not arbitrary, but necessary and true. If the distinction is placed outside the unity, every division that is given of it is, like the concepts themselves, arbitrary; and every enumeration is also arbitrary, because those concepts can be infinitely multiplied. In exchange for the rationally determined and completely unified distinctions of the pure concepts, the pseudoconcepts offer multiple groups, arbitrarily formed, and sometimes also unified in a single group, which embraces the entire field of the knowable, but in such a way as not to exclude an infinite number of other ways of apprehending it.

In these groups the empirical concepts simulate the arrangement of the pure concepts, reducing the particular to the universal, that is to say, a certain number of concepts beneath another concept. But it is impossible in any way to think these subordinate concepts, as actualizations of the fundamental concept, which are developed from one another and return into themselves; hence we are compelled to leave them external to one another, simply co-ordinated. The scheme of *subordination* and *co-ordination*, and its relative spatial symbol (the symbol of *classification*),

which is a right line, on the upper side of which falls perpendicularly another right line, and from whose lower side descend other perpendicular and therefore parallel right lines, is opposed to the circle and is the most evident ocular demonstration of the profound diversity of the two procedures. It will always be impossible to dispose a nexus of pure concepts in that classificatory scheme without falsifying them; it will always be impossible to transform empirical concepts into a series of grades without destroying them.

The definition in the empirical concepts, and the notes of the concept.

In consequence of the scheme of classification, the definition which, in the case of pure concepts, has the three moments of universality, particularity, and singularity, in the case of empirical concepts has only two, which are called *genus* and *species*; and is applied according to the rule, by means of the *proximate genus* and the *specific difference*. Its object indeed is simply to record, not to understand and to think, a given empirical formation; and this is fully attained when its position is determined by means of the indication of what is above and what is beside it. In order to determine it yet more accurately, the doctrine of the definition has been gradually enriched with other *marks* or *predicables*, which, in tradi-

tional Logic, are five: *genus*, *species*, *differentia*, *property*, *accident*. But it is a question of caprice upon caprice, of which it is not advisable to take too much account. And as it would be barbaric to apply the classificatory scheme to the pure concepts, so it would be equally barbaric to define the pure concepts by means of *marks*, that is, by means of characteristics mechanically arranged.

Series in the abstract concepts.

Where the thinker forgets the true function of the empirical concepts and is seized with the desire to develop them rationally, and thus to overcome the atomism of the scheme of classification and of extrinsic definition, he is led to refine them into abstract concepts, in which that scheme and that method of definition are overcome: the classification becomes a *series* (numerical series, series of geometrical forms, etc.), and the definition becomes *genetic*. But this improvement not only makes the empirical concepts disappear, and is therefore not improvement but death (like the death which the empirical concepts find in true knowledge when they return or mount up again to pure thought); but such improvement substitutes for empiricism emptiness. Series and genetic definitions answer without doubt to demands of the practical spirit; but, as we know,

they do not yield truth, not even the truth which lies at the bottom of an empirical concept or of a falsified and mutilated representation. Hence, here as elsewhere, empirical concepts and abstract concepts reveal their double one-sidedness, and exhibit more significantly the value of the unity which they break up; the distinction, which is not classification, but circle and unity; the definition, which is not an aggregate of intuitive data; the series, which is a complete series; the genesis, which is not abstract but ideal.

VI

OPPOSITION AND LOGICAL PRINCIPLES

Opposite or contrary concepts.

By what has been said, we have made sufficiently clear the nature of distinct concepts, that is to say, unity in distinction and distinction in unity, and we have left no doubt as to the kind of unity which the concept affirms, that it is not *in spite of* but *by means of* distinction. But another difficulty seems to arise, due to another order of concepts, which are called *opposites* or *contraries*.

Their difference from distincts.

It is indubitable that opposite concepts neither are nor can be reduced to distincts; and this becomes evident so soon as instances of both are recalled to mind. In the system of the spirit, for instance, the practical activity will be distinct from the theoretic, and within the practical activity the utilitarian and ethical activities will be distinct. But the contrary of the practical activity is practical inactivity, the contrary of utility, harmfulness, the contrary of morality, immorality. Beauty, truth, utility, moral

good are distinct concepts; but it is easy to see that ugliness, falsehood, uselessness, evil cannot be added to or inserted among them. Nor is this all: upon closer inspection we perceive that the second series cannot be added to or mingled with the first, because each of the contrary terms is already inherent in its contrary, or accompanies it, as shadow accompanies light. Beauty is such, because it denies ugliness; good, because it denies evil, and so on. The opposite is not positive, but negative, and as such is accompanied by the positive.

Confirmation of this given by the Logic of empiria.

This difference of nature between opposite concepts and distinct concepts is also reflected in empirical Logic, that is, in the theory of pseudoconcepts; because this Logic, while it reduces the distinct concepts to *species*, refuses to treat the opposites in like manner. Hence one does not say that the genus *dog* is divided into the species *live* dogs and *dead* dogs; or that the genus *moral man* is divided into the species *moral* and *immoral* man; and if such has sometimes been affirmed, an impropriety—even for this kind of Logic—has been committed, since the *species* can never be the *negation* of the *genus*. So this empirical Logic confirms in its own way that opposite concepts are different from distinct.

Difficulty arising from the double type of concepts, opposites, and distincts.

It is, however, equally evident that we cannot content ourselves with enumerating the opposite, side by side with the distinct concepts; because we should thus be adopting non-philosophical methods in place of philosophical, and in the philosophical theory of Logic should be lapsing into illogicality or empiricism. If the unity of the concept be at the same time its *self-distinction*, how can that same unity have another parallel sort of division or self-distinction, which is *self-opposition*? If it is inconceivable to resolve the one into the other, and to make of the opposites distinct concepts, or of the distincts opposite concepts, then it is not less inconceivable to leave both distincts and opposites within the unity of the concept unmediated and unexplained.

Nature of the opposites; and their identity with the distincts when distinguished from them.

It will possibly serve towards a solution of this difficulty—undoubtedly a very grave one—to go deeply into the nature of the difference between opposite and distinct concepts. These latter are distinguishable in unity; reality is their unity and also their distinction. Man is thought and action; indivisible but distinguishable forms; so much so that in so far as we think we deny action, and in so far as we act we deny thought. But the opposites are not distinguishable in this way: the man who commits an evil action, *if he*

really does something, does not commit an evil action, but an action which is useful to him; the man who thinks a false thought, *if he does something real*, does not think the false thought, indeed does not think at all, but, on the contrary, lives and provides for his own convenience and in general for a good which at that instant he desires. Hence we see that the opposites, when taken as distinct moments, are no longer opposites, but distincts; and in that case they retain negative denominations only metaphorically, whereas, strictly speaking, they would merit positive. In order, therefore, that the consideration of opposition be not changed when superficially regarded into that of distinction, it is desirable not to make of it a distinction in the bosom of the concept, that is to say, to combat every distinction by opposition, by declaring it to be *merely abstract*.

Impossibility of distinguishing one opposite from another, as concept from concept.

So true is this, that no sooner are opposite terms taken as distincts than the one becomes the other, that is to say, both evaporate into emptiness. The disputes caused by the opposition of *being* to *not-being* and the unity of both in *becoming* are celebrated in this connection. And we know that being, thought as pure being, is the same as not-being or nothing; and nothing, thought as pure nothingness, is the same as pure

being. Thus, the truth is neither the one nor the other, but is becoming, in which both are, but as opposites, and, therefore, indistinguishable: becoming is being itself, which has in it not-being, and so is also not-being. We cannot think the relation of being to not-being as the relation of one form of the spirit, or of reality, to another form. In the latter case we have unity in distinction: in the former, rectified or *restored* unity, that is to say, reaffirmed against *emptiness*; against the empty unity of mere being, or of mere not-being; or against the mere sum of being and of not-being.

The dialectic. The two moments should certainly be synthesized, when we attack the abstract thought, which divides them: taken in themselves, they are, not two moments united in a third, but one only, the third (in this case also the number is a symbol), that is to say, the indistinguishability of the moments. It thus happens (be it said in passing) that Hegel, to whom we owe the polemic against empty being, was content for this purpose neither with the words *unity* and *identity*, nor with *synthesis*, nor with *triad*, and preferred to call this indistinguishable opposition in unity the objective *dialectic* of the real. But whatever be the words that we chose to employ, the thing

is what has been said. The opposite is not the distinct of its opposite, but the abstraction of the true reality.

The opposites are not concepts, but the unique concept itself.

If this be the fact, the duality and parallelism of distinct and opposite concepts no longer exist. The opposites are the concept itself, and therefore the concepts themselves, each one in itself, in so far as it is determination of the concept, and in so far as it is conceived in its true reality. Reality, of which logical thought elaborates the concept, means, not motionless being or pure being, but opposition: the forms of reality, which the concept thinks in order to think reality in its fullness, are opposed in themselves; otherwise, they would not be forms of reality, or would not be at all. *Fair is foul and foul is fair*: beauty is such, because it has within it ugliness, the true is such because it has in it the false, the good is such because it has within it evil. If the negative term be removed, as is usually done in abstract thought, the positive also disappears; but precisely because, with the negative, the positive itself has been removed. When we talk of negative terms, or of non-values and so of not-beings as existing, existence really means that to the *establishment* of the fact we add the *expression of the desire* that another existence

should arise upon that existence. "You are dishonest" means "You are a man that seeks your own pleasure" (a theoretic judgment); "but you *ought to be*" (no longer a judgment, but the expression of a desire) "something else, and so serve the universal ends of Reality." "You have written an ugly verse" will mean, for example, "You have provided for your own convenience and repose, and so have accomplished an economic act" (a theoretic judgment); "but you *ought to* accomplish an æsthetic act" (no longer judgment, but the expression of a wish). Examples can be multiplied. But every one has in him evil, because he has good: Satan is not a creature extraneous to God, nor the Minister of God, called Satan, but God himself. If God had not Satan in himself, he would be like food without salt, an abstract ideal, a simple *ought to be* which is not, and therefore impotent and useless. The Italian poet who had sung of Satan, as "rebellion" and "the avenging force of reason," had a profound meaning when he concluded by exalting God: as "the most lofty vision to which peoples attain in the force of their youth," "the Sun of sublime minds and of ardent hearts." He corrected and integrated the one abstraction

with the other, and thus unconsciously attained to the fullness of truth.

Affirmation and negation.

Thought, in so far as it is itself life (that is to say, the life which is thought, and therefore life of life), and in so far as it is reality (that is to say, the reality which is thought, and therefore reality of reality) has in itself opposition ; and for this reason it is also *affirmation and negation* ; it does not affirm save by denying, and does not deny save by affirming. But it does not affirm and deny save by distinguishing, because thought is distinction, and we cannot distinguish (truly distinguish *i.e.*, which is a different thing from the rough and ready separations made by the pseudoconcepts) save by unifying. He who meditates upon the connections of affirmation-negation and unity-distinction has before him the problem of the nature of thought, and so of the nature of reality ; and he ends by seeing that those two connections are not parallel nor disparate, but are in their turn unified in unity—distinction understood as effective reality, and not as simple abstract possibility, or desire, or mere ought to be.

The principle of identity and contradiction ; its true meaning and false interpretation.

If we now wish to state the nature of thought as reality in the form of *law* (a form which we know to be one with that of the concept, though

the first term be adopted by preference for the pseudoconcepts), we can only say that the law of thought is the law of unity and distinction, and therefore that it is expressed in the two formulæ A is A (unity) and A is not B (distinction), which are precisely what is called the law or *principle of identity and contradiction.* It is a very improper, or, rather, a very equivocal formula, chiefly because it allows it to be supposed that the law or principle is outside or above thought, like a bridle and guide, whereas it is thought itself; and it has the further inconvenience of not placing in clear relief the unity of identity and distinction. But these are not too great evils, because misunderstandings can be made clear, and because—what we will not tire of repeating—all formulæ, all words indeed, are exposed to misunderstandings.

Another false interpretation; struggle with the principle of opposition. False application of this principle.

We have a much greater evil, when the principle of identity and contradiction is formulated and understood, not in the sense that A is not B, but in that of A is A only and not also not A, or its opposite; because, understood in this way, it leads directly to placing the negative moment outside the positive, not-being outside or opposite to being, and so, to the absurd conception of reality as motionless and empty being.

In opposition to this degeneration of the principle of identity and contradiction, another law or principle has been conceived and made prominent, whose formula is: "A is also not A," or "everything is self-contradicting." This is a necessary and provident reaction against the one-sided way in which the preceding principle was interpreted. But it too brings in its turn the inconvenience of all reactions, because it seems to rise up against the first law, like an irreconcilable rival destined to supplant it. In the first formula we have a duality of principles, which, as has been said, cannot logically be maintained; in the second, a degeneration in the opposite sense, the total loss of the criterion of distinction. To the false application of the principle of identity and contradiction succeeds *the false application of the dialectic principle.*

This false application has also been manifested in a form which could be called doubly arbitrary; that is to say, when it has attempted to treat dialectically neither more nor less than empirical and abstract concepts, whereas in any case it could not be applied to anything but the pure concepts. The dialectic belongs to opposed categories (or, rather, it is the thinking of the one category of opposition), not at all to re-

presentative and abstract fictions, which are based either upon mere representation or upon nothing. As the result of that arbitrary form, we have seen vegetable opposed to mineral, society opposed to the family, or even Rome opposed to Greece, and Napoleon to Rome; or the superficies actually opposed to the line, time to space, and the number two to the number one. But this error belongs to another more general error, which we shall deal with in its place, when discussing philosophism.

Errors of the dialectic applied to the relation of the distincts.

Here it is important to indicate only that false application of the dialectic which tends to resolve in itself and so to destroy distinct concepts, by treating them as opposites. The distinct concepts are distinct and not opposite; and they cannot be opposite, precisely because they already have opposition in themselves. Fancy has its opposite in itself, fanciful passivity, or æsthetic ugliness, and therefore it is not the opposite of thought, which in its turn has its opposite in itself, logical passivity, antithought, or the false. Certainly (as has been said), he who does not make the beautiful (in so far as he does anything, and he cannot but do something) effectively produces another value, for example the useful, and he who does not think, if he does anything,

produces another value, the fanciful for instance, and creates a work of art. But in this way we issue from those determinations considered in themselves, from the opposition which is in them and *which constitutes them*; and from the consideration of effectual opposition we pass to the consideration of distinction. Considered as real, the opposite cannot be anything but the distinct; but the opposite is precisely the unreal in the real, and not a form or grade of reality. It will be said that unless one distinct concept is opposed to another, it is not clear how there can be a transition from one to the other. But this is a confusion between concept and fact, between *ideal* and therefore eternal moments of the real and their *existential* manifestations. Existentially, a poet does not become a philosopher, save when in his spirit there arises a contradiction to his poetry, that is to say, when he is no longer satisfied with the individual and with the individual intuition: in that moment, he does not pass into but is a philosopher, because to pass, to be effectual, and to become are synonyms. In the same way, a poet does not pass from one intuition to another, or from one work of art to another, save through the formation of an internal contradiction, owing to which his previous work

no longer satisfies him; and he passes into, that is to say he becomes and truly is, *another* poet. Transition is the law of the whole of life; and therefore it is in all the existential and contingent determinations of each of these forms. We pass from one verse of a poem to another because the first verse satisfies, and also does not satisfy. The ideal moments, on the contrary, do not pass into one another, because they are eternally in each other, distinct, and one with each other.

Its reductio ad absurdum.

Moreover, the violent application of the dialectic to the distincts, and their illegitimate distortion into opposites, due to an elevated but ill-directed tendency to unity, is punished where it sins; that is to say, in not attaining to that unity to which it aspired. The connection of distinct is circular, and therefore true unity; the application of opposites to the forms of the spirit and of reality would produce, on the contrary, not the circle, which is true infinity, but the *progressus ad infinitum*, which is false or bad infinity. Indeed, if opposition determine the transition from one ideal grade to the other, from one form to the other, and is the sole character and supreme law of the real, by what right can a final form be established, in which that transition

should no longer take place? By what right, for instance, should the spirit, which moves from the impression or emotion and passes dialectically to the intuition, and by a new dialectic transition to logical thought, remain calm and satisfied there? Why (as is the contention of such philosophies) should the thought of the Absolute or of the Idea be the end of Life? In obedience to the law of opposition, it would be necessary that thought, which denies intuition, should be in its turn denied; and the denial again denied; and so on, to infinity. This negation to infinity exists, certainly, and it is life itself, seen in representation; but precisely for this reason we do not escape from this evil infinite of representation save through the true infinite, which places the infinite in every moment, the first in the last and the last in the first, that is to say, places in every moment unity, which is distinction.

We must, however, recognize that the false application of the dialectic has had, *per accidens*, the excellent result of demonstrating the instability of a crowd of ill-distinguished concepts; as we must take advantage of the devastation and overturning of secular prejudices which it has brought about. But that erroneous dialectic has also promoted the habit of lack of precision

in the concepts, and sometimes encouraged the charlatanism of superficial thinkers; though this too, *per accidens*, so far as concerns the initial motive of dialectical polemic is rich with profound truth.

The improper form of logical principles or laws. The principle of sufficient reason.

The form of *law* given to the concept of the concept has led to this confusion; for it is an improper form, all saturated with empirical usage. Given the law of identity and contradiction, and given side by side with it that of opposition or dialectic, there inevitably arises a seeming duality; whereas the two laws are nothing but two inopportune forms of expressing the unique nature of the concept, or, rather, of reality itself. The peculiar nature of the concept may rather be said to be expressed in another law or principle, namely that of *sufficient reason.* This principle is ordinarily used as referring to the concept of cause, or to the pseudoconcepts, but (both in its peculiar tendency and in its historical origin) it truly belonged to the concept of end or reason. That is to say, it was desired to establish that things cannot be said to be known, when any sort of cause for them is adduced, but on the contrary, that cause must be adduced, which is also the end, and which is, therefore, the *sufficient* reason. But what else does seeking the sufficient

reason of things mean but thinking them in their truth, conceiving them in their universality, and stating their concept? This is logical thought, as distinct from representation or intuition, which offers things but not reasons, individuality but not universality.

It is not worth while talking about the other so-called logical principles; because, either they have been already implicitly dealt with, or they are ineptitudes without any sort of interest.

SECOND SECTION

THE INDIVIDUAL JUDGMENT

I

THE CONCEPT AND VERBAL FORM. THE DEFINITIVE JUDGMENT

Relation of the logical with the æsthetic form.

WITH the ascent from the intuition-expression to the concept, and with the concentration upon it of our attention, we have risen from the purely imaginative to the purely logical form of the spirit. We must now, so to speak, begin the descent; or rather consider in greater detail the position that has been reached, in order to understand it in all its conditions and circumstances. Were we not to do this, we should have given a concept of the concept, which would err by abstraction.

The concept as expression.

The concept, to which we have risen from intuition, does not live in empty space. It does not exist as a mere concept, or as something abstract. The air it breathes is the intuition

itself, from which it detaches itself, but in whose ambient it continues. If these images seem unsuitable, or somewhat drawn from the sphere of representations, we may choose others, such as that, which we used on another occasion, of the second grade, which, to be second, must rest upon the first, and, in a certain sense, be the first. The concept does not exist, and cannot exist, save in the intuitive and expressive forms, or in what is called language. To think is also to speak; he who does not express, or does not know how to express his concept, does not possess it: at the most, he presumes or hopes to possess it. Not only is there never in reality an unexpressed representation, a pictorial vision unpainted, or a song unsung; but there is never even a concept which is simply thought and not also translated into words.

We have previously defended this thesis against the objections which are wont to be made to it.[1] But in order to recapitulate and thus to avoid the misunderstandings which might arise from the abbreviating formulæ which we use, it will be well to repeat that the concept is not expressed only in the so-called vocal or verbal forms; and if we mention these more than

[1] See *Æsthetic*, part i. chap. iii.

others, it will be by synecdoche, that is to say, when we refer to them, we desire to take them as representative of all the others. Undoubtedly, the affirmation that the concept can also be expressed in non-verbal form may cause surprise. It will be said that geometry itself, in so far as it describes geometrical figures, at the same time employs or implies speech; and we shall be ironically challenged to attempt to set the *Critique of Pure Reason* to music or to make a building of Newton's *Natural Philosophy*. But we must carefully beware of breaking up the unity of the intuitive spirit, because errors arise and become incorrigible, precisely through such breaking up. Words, tones, colours, and lines are physical abstractions, and only by abstraction can they be successfully separated. In reality, he who looks at a picture with his eyes also speaks it in words to himself; he who sings an air also has its words in his spirit; he who builds a palace or a church speaks, sings, and makes music; he who reads a poem sings, paints, sculptures, constructs. *The Critique of Pure Reason* cannot be set to music, because it already has its music; the *Natural Philosophy* cannot be built in stone, because it is already architectonic; in exactly the same way that the *Transfiguration* cannot be

turned into a symphony in four movements, or the *Promessi Sposi* into a series of pictures. Thus the challenge, if made, would testify to the lack of reflection on the part of the challengers, for they would confuse physical distinctions with the real and concrete act of the intuitive spirit.

Æsthetic and Æsthetic-logical expressions or expressions of the concept; propositions and judgments.

Owing to the incarnation of the concept or logic in expression and language, language is quite full of logical elements; hence people are often led astray into affirming (we have already made clear the erroneousness[1] of this) that language is a logical function. Water might as well be called wine, because wine has been poured into the water. But language as language or as simple æsthetic fact is one thing, and language as expression of logical thought is another, for in this case, certainly, language remains always language and subject to the law of language, but is also more than language. If the first be termed simple expression, λόγος σημαντικός, as Aristotle said, or *judicium aestheticum sive sensitivum*, according to the school of Baumgarten, the second must on the contrary be called affirmation, λόγος ἀποφαντικός, *judicium logicum* or *aesthetico-logicum*. To this same issue we can reduce, if we understand it

[1] See Sect. I. Chap. III.

properly, the distinction between *proposition* and *judgment*, for they are only distinguishable in so far as it is assumed that the second form is dominated by the concept, whereas the first is given as free of such domination.

But we should seek in vain for facts in proof of expressions belonging to either form, because we cannot furnish them without making the proviso that we understand them in the meaning of one or other of the two forms. Taken by themselves, any verbal expressions which we adduce or can adduce as proofs are indeterminate and therefore of many meanings. "Love is life" can be the saying of a poet who notes an impression with which his soul is agitated and marks it with fervour and solemnity; or it can be, equally, the logical affirmation of some one philosophizing on the essence of life. "Clear, fresh, and sweet waters," when uttered by Petrarch, is an æsthetic proposition; but the same words become a logical judgment when, for example, they answer the question as to which is the most celebrated love song of Petrarch, or pseudo-logical when applied by a naturalist to the substance water. A word no longer has meaning, or—what amounts to the same thing—has no definite meaning, when it is abstracted from

the circumstances, the implications, the emphasis, and the gesture with which it has been thought, animated, and pronounced. Nevertheless, forgetfulness of this elementary hermeneutic canon, by which a word is a word only on the soil that has produced it and to which it must be restored, has been in Logic the cause of interminable disputes as to the logical nature of this or that verbal phrase, separated from the whole to which it belonged and rendered abstract. It would be much less equivocal to adduce such poems as *I Sepolcri*, or the song *A Silvia*, as documents of æsthetic propositions, and philosophical treatises (for examples, the *Metaphysics* or the *Analytics*) as documents of æsthetic-logical judgments or propositions. But here, too, we should need to add: "poetry considered as poetry," and "philosophy considered as philosophy," since it is clear that a poem is prose in the soul of him who reflects upon it, and prose is poetry in the soul of a writer vibrating with enthusiasm and emotion in the act of composition. Facts do not constitute proofs in philosophy, save when they are interpreted through the medium of philosophy; and then, too, they become mere *examples*, which aid in fixing the attention upon what is being demonstrated.

Surpassing of the dualism of thought and language.

The relation between language and thought, conceived as we have conceived it, does not admit the criticism that it creates an insuperable dualism, though that criticism was justly aimed at those who set the two concepts side by side and parallel with one another. In that case the sole means that remained of obtaining unity was to present language as an acoustic fact and declare thought to be the unique psychic reality, and language the physical side of the psycho-physical nexus. But no one will henceforth wish to repeat the blasphemy that language (the synonym of fancy and poetry) is nothing but a physical-acoustic fact and merely adherent to thought. We have in the two forms, notwithstanding their clear distinction, not parallelism and dualism, but an organic relation of connection in distinction,—the first form being implied in the second, the second crystallized into the first,—precisely in conformity with that rhythmical movement of the concepts which we have already discussed. And thus, too, when asked if the *prius* of Logic be the concept or the judgment, we must reply that the judgment, understood as an æsthetic proposition, is certainly a *prius*; but understood as a logical judgment, it is neither a *prius* nor a *posterius* in relation to

the concept, since it is the concept itself in its effectuality.

This pure expression of the concept, which is the logical judgment, constitutes what is called *definitive judgment* or *definition.* This, considered on its verbal side, or as the synthesis of thought and word, does not give rise to any special logical theory in addition to that which we have already stated, when definition showed itself to be one with distinction or conceptual thought; nor does it give rise to any special æsthetic doctrine, since the general doctrine expounded elsewhere includes this also. The dispute, as to whether the definition be verbal or real, finds its solution in the relation we have just established between thought and words; hence definition is verbal because it is real, and *vice versa.* And as to the other meaning of the question, whether, that is to say, definition be *nominal* or *real*, conventional or corresponding with the truth, that finds its solution in the distinction between pseudoconcepts and concepts, the first of which, it is clear, are *defined* only in a nominalist or conventional way, because they *are*, in fact, nominalist and conventional.

The logical judgment as definition.

Greater importance attaches to the other dispute, as to whether the definitive judgment be

The indistinguishability of subject and predicate in the definition. Unity of essence and existence.

analysable into subject, predicate, and copula, whether, for example, the definition: "the will is the practical form of the spirit," can be resolved in the terms: "will" (subject), "practical form of the spirit" (predicate), and "is" (copula). Now, the difference between subject and predicate is here illusory, since predicate means the universal which is predicated of an individual, and here both the so-called subject and the so-called predicate are two universals, and the second, far from being more ample than the first, is the first itself. As to the "is," since the two distinct terms which should be copulated are wanting, it is not a copula; nor has it even the value of a predicate, as in the case in which it is asserted of an individual fact that it is, that is to say, that it has really happened and is *existing*. The "is," in the case of the definition, expresses nothing except simply the act of thought which thinks; and what is thought is, in so far as it is thought; if it were not, it would not be thought; and if it were not thought, it would not be. The concept gives the essence of things, and in the concept *essence involves existence*. That this proposition has sometimes been contested is due solely to the confusion between the essence, which is existence and therefore concept, and the existence

which is not essence and therefore is representation. It is due therefore to the problem to which representations gave rise in this respect, and with which we shall deal further on. Freed from this confusion, the proposition is not contestable, and is the very basis of all logical thought, of which we have to examine the conceivability, or essence, that is, its internal necessity and coherence; and when this has been established, existence has also been established. If the concept of *virtue* be conceivable, virtue is; if the concept of *God* be conceivable, God is. To the most perfect concept the perfection of existence cannot be wanting without being *itself* non-existent.

Alleged emptiness of the definition.

Yet it would seem that though the definition affirms both essence and existence, and therefore the reality of the concept, it is, nevertheless, an empty form; for we have recognized that in every definition subject and predicate are the same, and it is therefore a tautological judgment. Certainly, the definition is tautological, but it is a sublime tautology, altogether different from the emptiness which is usually condemned in that expression. The tautology of the definition means that the concept is equal only to itself and cannot be resolved into another or explained by another. In the definition truth *praesentia patet*, and if the

Goddess does not reveal herself by her simple presence, it is in vain that the priest will strive to discover her to the multitude by comparing her with what is inferior to her: with sensible things, which are particular manifestations of her.

Critique of the definition as fixed verbal form.

As in relation to the concept the definition is not to be held distinguishable, so in its expressive or verbal aspect it must not be understood as a formula separate from the basis of the discourse, as though it were the official garb of truth, the only worthy setting for that gem. Such a conception of its nature has caused *pedantry of definition*, *hatred* of and consequent rebellion *against definitions*. That pedantry, however, like all pedantries, had some good in it; that is to say, it energetically affirmed the need for exactitude; and too frequently the rebellion, denying, like all rebellions, not only the evil but also whatever good there might be in the thing opposed, has, through its hatred of formulæ, made exactitude of thought a negligible matter. But definition, taken verbally, is not a formula, a period or part of a book or discourse; it is the whole book or the whole discourse, from the first word to the last, including all that in it may seem accidental or superficial, including even the accent, the warmth, the emphasis, and the gesture

of the living word, the notes, the parentheses, the full stops, and commas of the writing. Nor can we indicate a special literary form of definition, such as *the treatise or system or manual*, because the definition or concept is given alike in opuscules and in dialogues, in prose and in verse, in satire and in lyric, in comedy and in tragedy. To define, from the verbal point of view, means to express the concept; and all the expressions of the concept are definitions. This might trouble rhetoricians desirous of devoting a special chapter to the form of scientific treatment; but it does not trouble good sense, which quickly recognizes that the thing is just so, and that an epigram may give that precise and efficacious definition in which the ample scholastic volume of a professor sometimes fails, although full of pretence in this respect.

II

THE CONCEPT AND THE VERBAL FORM. THE SYLLOGISM

Identity of definition and syllogism.

THE definition not only is not a formula separable or distinguishable from the thread of the discourse, but it cannot even be separated or distinguished from the ratiocinative forms or forms of demonstration, as is implied in the custom of logicians, who make the doctrine of the definition or of the *systematic* forms, as they usually call them, follow that of the forms of demonstration. They ingenuously imagine that thought, after having had a rough-and-tumble with its adversaries, and after having proclaimed, shouted, and finally vindicated its own right, mounts the rostrum and henceforth calm and sure of itself begins to define. But, in reality, to think is to combat continuously without any repose; and at every moment of that battle there is always peace and security; and definition is indistinguishable from demonstration, because it is found at

every instant of the demonstration and coincides with it. *Definition and Syllogism* are the same thing.

Connection of concepts and thought of the concept.

The syllogism, indeed, is nothing but a connection of concepts; and although it has been disputed as to whether it must be considered so, or rather as a connection of logical propositions or judgments, the dispute is at once solved, so far as we are concerned, by observing that precisely because the syllogism is a connection of concepts, and concepts only exist in verbal forms, that is to say, in propositions or judgments, the syllogism is also a connection of judgments. This serves to reinforce the truth that if the effective presence of the verbal form must always be recognized in the logical fact, it must, on the other hand, be forgotten when Logic is being constructed and the nature of Logic and of the concept is being sought. Now, the connection of the concepts represents nothing new in relation to the thinking of the concept. As has already been seen, to think the concept signifies to think it in its distinctions, to place it in relation with the other concepts and to unify it with them in the unique concept. A concept thought outside its relations is indistinct, that is to say, not thought at all.

Therefore, the connection of the concepts, or syllogizing, cannot be conceived as a new and more complex logical act. To syllogize and to think are synonymous; although, in the ordinary use of language, the term "to syllogize" throws into special relief the verbal aspect of thinking, and, more exactly, the *dynamic* character of verbal exposition, which is indeed the very character of this exposition, for it is with difficulty, or only empirically, that it can be distinguished into static and dynamic, definition and demonstration.

Identity of judgment and of syllogism.

But if the syllogism be thus identified with the concept itself, it may nevertheless seem that it must be distinguished from the judgment of definition seeing that the syllogism is a form of logical thought, and consequently of verbal expression, quite distinct from and incapable of being confounded with any other: a connection of *three* judgments, two of which are called *premisses* and the third *conclusion*, closely cemented by the syllogistic force, which is placed in the *middle* term. This character of triplicity seems ineradicable and peculiar to the syllogism in contrast with the judgment.

Some question, however, must be raised concerning this characteristic because of another

characteristic universally recognized in the syllogism; namely, that the premisses are conclusions of other syllogisms, just as the conclusion becomes, in its turn, a premiss. This being so, it might be said with greater truth that the syllogism is to syllogize or to think; and since this is infinite, so the propositions of which it consists are also infinite. On the other hand, there is no judgment which is not a syllogism, since it is clear that he who affirms a judgment affirms it by some reasoning or syllogism, present and active in his spirit, though more or less understood in the words. And are not other propositions understood in the syllogisms which are properly so-called, not only in the forms, which are called abbreviated (immediate inferences, enthymemes, etc.), but also in all the other forms; since it is admitted that every syllogism, as has just been observed, presupposes other preceding syllogisms, indeed an infinity of others? It will be replied that at the end of the chain there must yet be found the difference between judgment and syllogism, or two first judgments, which are not produced by syllogism, and form the columns, upon which the structure of the first conclusion rests. But such an answer (if it do not imply simply the strange fancy

that thought has a beginning and therefore also an end in time) will mean that judgment and syllogism are distinct in intrinsic character, which makes the one the necessary condition of the other. Now, this intrinsic distinctive character is precisely what cannot be found, because it does not exist; and if it be not in every link, it is vain to seek it at the beginning of the chain.

The middle term and the nature of the concept.

Certainly, that *venatio medii*, that *ergo*, that unification of triplicity, are things of much importance. But whence comes their importance if not from being the expression of the synthetic force of thought, of thought which unifies and distinguishes, and distinguishes because it unifies and unifies because it distinguishes? And is triplicity truly triplicity, one, two, three, arithmetically enumerable? But if this be so, how is it that we never succeed in counting those three, resolving each one of them into a series of similar terms, or of other propositions and concepts? Upon attentive consideration we perceive that here, too, the number three is symbolical, and that it does no more than designate the distinction, which unifies or thinks the *singular* concept in the *universal* through the *particular*, or determines the *universal*

through the *particular*, by making it a *singular* concept, whence it remains perfectly certain that the relation of these three determinations is not numerical. Such a logical operation, not being anything special, but simply logical reasoning itself, is of necessity found also in the judgment.

Pretended non-definitive logical judgments.

A possible objection at this point is that even if the unity of judgment and syllogism can be held to be demonstrated as regards definitions and syllogisms which are the basis of definitions, yet it has not been demonstrated for the other forms of syllogisms and logical judgments, which are not definitive. But if these judgments and syllogisms be logical, they cannot fail to be definitive, or to have for their content affirmations of concepts. "All men are mortal" is a definition of the concept of man, whose mortality is verbally emphasized or his immortality denied. It is without doubt an incomplete definition, because it is torn from the web of thoughts and of speech of which it formed part; and this web will also always be incomplete or capable of infinite completion by means of new affirmations and new negations. But in its incompleteness it is at the same time also complete, because it affirms a concept of reality, of life and death,

of finite and infinite, of spirituality and of its forms, and so on; these are all presupposed determinations, and therefore existing and operating in the concepts of *man* and *mortality*. "Caius is a man" (which is the second premiss of the syllogism traditionally adduced as an example) is certainly not a definition (though it presupposes and contains many definitions) precisely for the reason that it is not a pure logical judgment. Hence it happens that the conclusion itself: "therefore Caius is mortal," is more than a pure logical conclusion, since it also contains a historical element, the person of Caius. But we shall speak further on of these individual or historical judgments; and then we shall also see in what relation they stand to the universal or pure logical judgments, and if it be truly possible to distinguish between them, otherwise than for the sake of convenience. The distinction is in any case convenient and does no harm at this point; and therefore for didactic reasons we allow it to stand; indeed we make use of it.

The syllogism as fixed verbal form. Its use and abuse.

Just as in the case of definitions, so also in the case of the syllogism, it is to be noted that the verbal expression does not consist of an obligatory formula, but assumes the most varied forms,

apparently very remote from syllogizing as commonly understood. The abuse of the syllogism as a formula continued for centuries, notably in mediæval Scholasticism, and notwithstanding the rebellion of the Renaissance, it has persisted among many philosophical schools, its last conspicuous manifestation being the didactic elaboration of the Leibnitzian philosophy, or Wolffianism. Certain of Wolff's demonstrations have remained famous, such as that concerning the construction of windows, contained in his *Manual of Architecture*. Here, having first of all established the *theorem*: "A window must be large enough for two persons to lean against it, side by side," he developed it in this way: "*Demonstration.* It is customary to lean against a window with another person in order to look out. But the architect must serve the interests of his employer in everything. Therefore he must make the window large enough for two persons to be able to be there side by side.[1] *Q.E.D.*"

No more such syllogistic pedantries have been seen in our times, but (as has been already remarked in reference to pedantry of definition) contempt for the formula has too often resulted in contempt even for the correctness of the reasoning. So

[1] Mentioned in Hegel, *Wiss. d. Logik*[2], iii. 370 *n.*

that it has sometimes been necessary to advise a bracing bath of scholasticism, and it has been observed and lamented of certain new civilizations (for example, of Russian culture, or of the Japanese people, who are so little addicted to mathematics), that they have not had a scholastic period, like that of the West, so general with them is the habit of incorrect, loose, and passionately impulsive and fantastic reasoning. Certainly the formula, the exercise of disputation in *forma*, the *logica scholastica utens* has its merits; and we must know how to have recourse to it when it is advantageous to do so, and to express thought in the brief and perspicuous formulæ of the syllogism, of the sorites, or of the dilemma. From this point of view the new methods of mathematical Logic or Logistic, upon which some are now working, and even the logical machines which have been constructed, would help; they would help — if they helped. For the point is just this: when formulæ, methods of demonstration, machines and the like, are recommended, expedients and instruments of practical or economic use are thereby proposed; and these cannot make good their existence otherwise than by getting themselves accepted for the utility—the saving of time and space, and so of fatigue, which they

effect. Like all technical inventions, those products must be brought to the market; and the market alone decides upon their value and assigns to them their price. At the present time, it seems that logistic methods have no value and price, save for certain narrow circles of people, who amuse themselves with them in their own way and so pass the time.

Erroneous separation of truth and reason of truth in the pure concepts.

Certain erroneous doctrines take their origin from the undue separation of demonstration and definition, conspicuously that particular error which places a difference of degree between *truth* and *reason* of truth, and consequently admits that a truth can be known without its reason being known. But a truth, of which the reason is not known, is not even truth; or it is truth only in preparation and in hypothesis. We hear much about the *intuition* with which men of genius are equipped, and which enables them to go straight to the truth, even when they are not capable of demonstrating it. But this intuition, when it is not that truth in preparation, or that orientation towards a truth still quite hypothetical, must of necessity be thought and thus also be demonstration of truth; it must be truth and also reason of truth; thought and reasoning performed no doubt with lightning rapidity, which is expressed in brief propositions

and needs going over again and rethinking, in order that it may afford a more ample and, from the didactic point of view, a more persuasive, exposition ; but it is always thought and reasoning.

Things are still worse, when not only is a diversity of degree admitted, but the complete *indifference* of demonstration to truth is proclaimed, so that many or infinite possible demonstrations of one identical truth would be possible. If by this it were meant merely that one identical truth, or one identical concept, can assume infinite verbal or expressive forms, and if demonstration were understood as "exposition" or "expression," there would be nothing to object. But if by demonstration be meant something truly logical, that which is properly called by that name in Logic, this thesis leads directly to the negation of truth, making the demonstration of truth, or truth itself, an illusion, a sophistical appearance created simply to persuade. Those acquainted with courts of law know that very often when a magistrate has made his decision and pronounced sentence he deputes to a younger colleague the task of "reasoning" it, or of providing an appearance of reasoning to what is indeed not a logical product, but simply the *voluntas* of a certain provision. But though this procedure be intel-

ligible and useful when it occurs in the field of practice and of law, it cannot be admitted in the theoretical field, where it would be the ruin of thought and indirectly of the will itself.

Difference between truth and reason of truth in the pseudoconcepts.

Naturally, all that has been said as to the definition and the syllogism has reference to the true and proper concept, or the pure concept. In the case of pseudoconcepts, where practical motives enter, definition is a simple *command* (a nominalist definition), and demonstration has no place, save for those of its elements that are derived from the pure concept: *given* the definitions, the reasoning must logically proceed in a determinate manner. In pseudoconcepts, then, definitions are separate from demonstrations: the first do not spring from the second and are not all one with them; the second presuppose the first and do not produce them. Of these definitions infinite demonstrations are possible, precisely because in reality none is possible, for the definitions themselves are infinite; and when a demonstration is given, this is done only *pro forma*; it is a deception, to conceal a practical convenience, or rather a logical reasoning employed to make it clear. It is for this reason also that the definitions employed in those demonstrations

seem to be obtained by means of an act of *faith* in the irrational; and here faith signifies, not the confidence of thought in itself, but the making a virtue of necessity, accepting as true what is not known as such.—For the rest, pseudoconcepts and concepts have the same relation with the verbal form; that is to say, all are expressed in the most various ways, and there is no obligatory form of language, which can be called the literary form of logical character. The style of the *Civil Code*, which aroused the admiration of Stendhal, is not the eternal style of laws, for laws were once even put into verse; as in like barbaric times the sciences used to be put into verse. In the life of the word, concepts and pseudoconcepts rush forward in such a way that it is vain to seek there for distinction among them.

III

CRITIQUE OF FORMALIST LOGIC

Intrinsic impossibility of formal Logic.

FROM the fact that in the verbal form all distinctions (pure concepts, and empirical and abstract concepts, distinct concepts and opposite concepts) are indistinguishable, and on the other hand all identities, such as that of concept, definition and demonstration, appear differentiated or capable of differentiation, we can deduce the impossibility of constructing logical Science by means of an analysis of the verbal form. The condemnation of all *formal* Logic is thus pronounced.

Its nature.

This Logic has been variously called *Aristotelian*, *peripatetic*, *scholastic*, after its authors and historical representatives; *syllogistic*, from the doctrine that forms its principal content; *formal*, from its pretensions to philosophic purity; *empirical*, by those who tried to drive it back to its place; and although this last name is correct, it would be better to call it *formal*,

and still better, *verbal*, to indicate of what the empiricism to which it is desired to allude, chiefly consists. Indeed, if empiricism be marked by its limiting itself to single representations, re-grouping them in types and arranging them in classes, there is no doubt that that method of treatment is empirical, which takes the logical function, not in the eternal peculiarity of its character as thought of the universal, but only in its various particular translations or manifestations, in which it acquires contingent characteristics. Since these contingent characteristics come to it, in the first place, from the verbal form, it can well be called verbalism. Owing to its verbalism, too, it has happened, that over and above the grammars of individual languages, there has been conceived as existing a *general, rational* and *logical* Grammar; and this hybrid science, which is no longer grammar and arose from logical assumptions, has developed in such a way as to be indistinguishable from empirical or verbal Logic.

Its partial justification.

Certainly, as mere empiricism, this so-called Logic could not be condemned. And Hegel was not wrong in remarking that if people are interested in establishing that there are sixty species of parrots and one hundred and thirty-

seven of veronica, it is not clear why it should be of less interest to establish the various forms of the judgment and of the syllogism. That discipline has its utility as mere empiricism, and it may be useful to any one to employ in certain cases the terminology in which an affirmation is characterized as positive or as merely negative, as particular or as universal, as a judgment that awaits reasoning and demonstration, as an immediate inference, enthymeme or sorites, as a conclusive or an inconclusive, or as a correct or an incorrect syllogism, and so on. It is also comprehensible how, as mere empiricism, it assumed a *normative* character, and was translated into *rules*; rules, which are valid within their own sphere, neither more nor less than are all empirical rules.

Its error.

But it does not limit itself to acting simply as an empirical description, nor even as a simple technique; it usurps a much more lofty office. Just as Rhetoric and Grammar, innocent and useful so long as they limit themselves to the functions of convenient grouping and convenient terminology, become false and harmful when they assume the attitude of sciences of absolute values, and must then be resolved into, and replaced by Æsthetic; so empirical or verbal

Logic becomes transformed into error when it claims to give the laws of thought, or the thought of thought, which cannot be other than the concept of the concept. It is not, then, *formal*, as it boasts itself to be, because the only logical form is the universal, and this alone is the object of logical investigation; but it is falsely formal, since it relies upon contingencies, and must, therefore, be called *formalist*. We reject it here exclusively in its formalist aspect; that is to say, in so far as it is a complex of empirical distinctions that wish to pass as rational and usurp the place of true rationality.

Its traditional constitution.

Several of such empirical distinctions, such as the distinction between thought and principle of thought, truth and reason of truth, judgments and syllogisms, and such-like, have been recorded and criticized; we shall proceed to mention others, when suitable opportunities occur. Here it will be well to refer to the general physiognomy and structure of that Logic, as it was embodied for centuries in the schools and still persists in treatises.

The three logical forms.

Its point of departure is the external distinction between words and connections of words, which belongs properly to Grammar. But words are then treated by it as concepts, and connec-

tions of words, as judgments. Thus it obtains the identification of the concept with the abstract and mutilated grammatical word and arrives at the monstrous determination of the concepts as things which are not in themselves either true or false. Thus, again, by constantly calling upon the connections of the concepts for succour, it succeeds in distinguishing the judgment from the mere proposition. A double criterion is constantly adopted in establishing these and other fundamental forms: the verbal and the logical; and formalist Logic oscillates equivocally between the two different determinations; whence the alternating appearance of truth and of falsehood, with which its distinctions present themselves. The syllogism, which should be the third fundamental form, is conceived as the connection of three distinct judgments; but if it yet retains its importance and preponderance over two-membered forms or over serial forms of more than three propositions and judgments, this is really because to the distinction and enumeration of the three propositions there is added the criterion of the concept as a nexus, or as a triunity of universal, particular and singular.

The theories of the concept and of the judgment.

The three fundamental forms have been reduced by some logicians to two, by others

amplified to four or to five, by adding to them the perceptive form or the definitive and systematic form. These restrictions and amplifications have always encountered resistance, because it was justly felt that in this way one form of empiricism was being mingled with another: the verbal form with empirical distinctions drawn from other presuppositions. But in determining in particular the three fundamental forms, formalist Logic has not been able to restrict itself to the mere distinction of words and propositions, artificially placed in relation with the pure concept; but has been obliged to draw from other sources. The concepts are variously classified, sometimes from the verbal point of view, as *identical*, *equivalent*, *equivocal*, *anonymous* and *synonymous*; sometimes from the logical point of view, as *distinct*, *disparate*, *contrary* or *contradictory*; sometimes from the psychological point of view, as *incomplete* and *complete*, *obscure* and *clear*, the concepts further always being understood as names, so that, for example, distinct concepts are indifferently philosophically distinct concepts, and empirically distinct concepts; and the contraries are both the philosophical contraries and those empirically so-called. The same has occurred in the classification of judgments where

sometimes the determinations of the concept are taken as foundation and the judgments distinguished as *universal, particular* and *individual*; sometimes the intrinsic dialectic nature of the concept, and they are distinguished as *affirmative, negative* and *indeterminate* or *infinite*; sometimes the stages passed through in the search for truth, and they are distinguished into *categorical, hypothetical* and *disjunctive*, or *apodeictic, assertory* and *problematic*. And these forms have further always been understood verbally. "Universality" is the "totality" empirically designated by the word, and not true universality; and "individuality," on the contrary, is not only the individuality of the representation, but also the single particularity of the distinct concept; "affirmative" is differentiated from "negative" by accidental grammatical form, and not because that unique act which is thought, at once affirmation and negation (as the will is both love and hatred) can be truly divided.

The theory of the syllogism.

The classification of syllogisms, founded exactly upon the empirical conception of the judgment as the copulation of a *subject* and a *predicate* affords a suitable parallel to this method of treatment of the judgment; subject and predicate being understood in an empirical and gram-

matical manner, whence they are also discovered in those verbal affirmations, in which they are not distinct, because they are identical, as in the case of the judgment of definition. For empirical Logic, in the judgment: "The will is the practical form of the spirit," "will" is subject and "practical form" predicate in the same way as in "Peter is a man," "Peter" is subject, and "man" predicate. From the distinction between subject and predicate, arise the four *figures* of the syllogism; the criterion being the position of the middle term in the two premisses of the three propositions of which the syllogism is formed. If the middle term be subject in the first premiss and predicate in the second, we have the first figure; if it be predicate in both, the second; if it be subject in both, the third; if it be predicate in the first and subject in the second, the fourth figure ("*sub-prae*, tum *prae-prae*, tum *sub-sub*, tum *prae-sub*"). But in order to deduce the moods of each figure recourse is then had to another criterion, indeed to two other criteria; that is, to the empirical distinctions of judgments into universal and particular, and into affirmative and negative, with the four consequent determinations into universal-affirmative judgments (A), universal-negative (E), particular-affirmative (I),

and particular-negative (O). Thus, in the first figure, two universal affirmative premisses constitute the first mood, and the conclusion is universal affirmative (*barbara*); two premisses, both universal, but one affirmative and the other negative, constitute the second, and the conclusion is universal negative (*celarent*); two premisses, one universal affirmative and the other particular affirmative, constitute the third mood, and the conclusion is particular affirmative (*darii*); two premisses, one universal negative and one particular affirmative, constitute the fourth mood, and the conclusion is particular negative (*ferio*). And so on.

Spontaneous reductions to the absurd of formal Logic.

This is not the occasion to go on expounding in its other particulars this construction, of which we have given an example, for it is very well known: nor to attach importance to criticizing it, since its foundations themselves have already been shown to be false and its hybrid genesis explained. Verbal Logic, which vaunts itself as rational, carries its own caricature in itself, namely the creation of *Sophisms*; because, since it seeks the force of thought in words, it cannot prevent sophistical ability from making use, in its turn, of words, in order capriciously to create thoughts and forms of thought. Thus verbal

Logic, in order to combat sophisms, is constrained hastily and eagerly to abandon simple verbal connections, and to take refuge in concepts and connections of concepts thought in words; that is to say, neither more nor less than to negate the formalist point of view. And with analogous self-irony it renounces that point of view and dissolves itself, when it tries to refute the fourth figure of the syllogism, or to reduce the second, third and fourth to the first, as the only real figure, and then the first to a connection of three concepts; not to mention the permanent self-irony and patent demonstration of falsity involved in the logical deduction of the figures of the syllogism which it makes from a series of moods, recognized as *not conclusive.*

Mathematical Logic or Logistic.

Formalist Logic has been the object of many violent attacks from the Renaissance onwards; but it cannot be said that it has been struck in its essential part, because up to the present, the principle itself, or the incoherence from which it springs, has not been attacked. Several attempts at reform have followed and still follow; they have all of them the same defect, which is the wish to reform formal Logic without issuing from its circle, and without refuting its tacit presumption—the pretension of obtaining thought in

words, concepts in propositions. The most considerable attempt of the kind that has been made, which has many zealous followers in our day, is *mathematical Logic*, also called *calculatory, algebraical, algorhythmic, symbolic, a new analytic*, or a *Logical calculus or Logistic.*

Its non-mathematical character.

It is admitted by those who profess it and is for the rest evident from the definitions of Logistic that have been given, that it has nothing in common with mathematics, for although the majority of its cultivators are mathematicians and use is made of the phraseology usual in Mathematics, and it is directed toward Mathematics, in certain of its practical intentions, there is nothing intrinsically mathematical in it. Logistic is a science which deals, not with quantity alone, but with *quantity and quality together*; it is a science of *things in general*; it is *universal mathematics*, containing also, subordinated to itself, the mathematical sciences properly so-called, but not coinciding with these. It means to be, not mathematics, but *a general science of thought.*

Example of its mode of treatment.

But the "thought" of Logistic is nothing but the "verbal proposition," which, in fact, supplies its starting-point. What the proposition is; whether it be possible truly to distinguish the

proposition we call "verbal" from all the others, poetical, musical, pictorial; whether the verbal proposition does not bear indistinctly in itself, a series of very diverse spiritual formations, from poetry to mathematics, from history and philosophy to the natural sciences; what language is and what the concept is—these and all other questions concerning the forms of the spirit and the nature of thought, remain altogether extraneous to Logistic and do not disturb it in its work. The propositions (the concept of the proposition remaining an unexplained presupposition) can be indicated by p, q, etc.; the relation of implication of one proposition in another can be indicated by the sign $\supset$, hence an isolated proposition is "that which implies itself" ($p.\supset.q.$). By following a method such as this, many distinctions of the traditional formalist Logic are eliminated, and in compensation for this, new ones are added and old and new are dressed in a new phraseology. The logical *sum* $a+b$ is the smallest concept, which contains the other two a and b and is what was previously called the "sphere of the concept"; the logical *product* $a \times b$ indicates the greater concept contained in a and in b, and answers to that which was previously called "comprehension." There are also new or re-

novated laws, like the law of *identity*, by force of which, in Logic (differently from Algebra), $a+a+a \ldots = a$; by which it is desired to signify this profound truth, that the repetition of one and the same concept as many times as one wishes, always gives the same concept;—the law of *commutation*, by which $ab = ba$;—or that of absorption, by which $a(a+b) = a$; or—(the convention being that the negation of a concept is indicated by placing against it a vertical line) the other beautiful laws and formulæ: $a+a \mid = a$; $(a \mid)a = a$; $aa \mid = o$. This is a charming amusement for those who have a taste for it.

Identity of nature of Logistic with formalist Logic.

Thus it is seen that if the words and the formulæ be somewhat different, the nature of mathematical Logic in no respect differs from that of formalist Logic. Where the new Logic contradicts the old, it is not possible to say which of the two is right; as of two people walking side by side over insecure ground, it is impossible to say which of the two walks securely. The very doctrine of the *quantification of the predicate* (which has been the leaven of the reform) in no wise alters the traditional manner of conceiving the judgment, with the corresponding arbitrary manner of distinguishing subject and

predicate. It simply establishes a convention with the object of being able to symbolize, with the sign of equality, the subject and the predicate:—the subject being included in the predicate, is part of it: "men are mortal" equals: "men are some mortals"; and so, "men" being indicated with *a* and "some mortals" with *b*, the judgment can be symbolized: $a = b$. For us, it is indifferent whether the modes of the syllogism be the 64 and the 19 recognized as valid by traditional Logic, or the 12 affirmative and the 24 negative of Hamilton's Logic, which distinguishes four classes of affirmative and four of negative propositions. It is indifferent whether the methods of conversion be three or two or one. It is indifferent whether logical laws or principles be enumerated as two, three, five or ten. Since we do not accept the point of departure, it is impossible for us, far from admitting the development, even to discuss it; save to demonstrate that from capricious choice comes capricious choice, as we have made sufficiently clear in our treatment of formalist Logic. Mathematical Logic is a new manifestation of this formalist Logic, involving a great change in traditional formulæ, but none in the intimate substance of that pretended science of thought.

As the *science of thought*, Logistic is a laughable thing; worthy, for that matter, of the brains that conceive and advocate it, which are the same that are promulgating a new Philosophy of language, indeed a new Æsthetic, with their insipid theories of the *universal Language*. As a formula of *practical utility* it is not incumbent upon us to examine it here; all the more since we have already had occasion to give our opinion upon this subject. In the time of Leibnitz, fifty years later in the last days of Wolffianism; a century ago in Hamilton's time; forty years ago in the time of Jevons and of others; and finally now, when Peano, Boole, and Couturat are flourishing, these new arrangements are offered on the market. But every one has always found them too costly and complicated, so that they have not hitherto been generally used. Will they be so in the future? The practical work of persuasion, proper to the commercial traveller seeking purchasers of a new product, and the foresight of the merchant or manufacturer as to the fortune that may await that product, are not pertinent to Philosophy; which, being disinterested, could here, at the most, reply with words of benevolent patience: "If they be roses, they will bloom."

Practical aspect of Logistic.

IV

THE INDIVIDUAL JUDGMENT AND PERCEPTION

Reaction of the concept upon the representation.

PROBLEMS of a widely different nature from these formalist playthings await exploration in the depths of the Science of Logic. And resuming what we have called the descent of the universal into the individual, it is of importance, after having established the relation between concept and form of expression, to examine in what way the concept reacts upon the representation, from which it appears to be at a stroke and altogether separated.

In more precise terms: Beyond doubt the concept is thought only in so far as it becomes concrete in an expressive form and itself also becomes, from this point of view, representative. Thus, a logical affirmation, or one that presents itself as logical, can be viewed under a twofold aspect, as logical and as æsthetic. It can be regarded as well thought-out, and so also very well expressed, perfectly æsthetic because perfectly

logical; or as very well expressed but ill thought, or not truly thought, and so not logical, and yet sentimental, passionate and imaginative. But this expression-representation, in which the concept lives (and which is, for example, the tone, the accent, the personal form, the style, which I am employing in this book to expound Logic), is a *new* representation, conditioned by the concept. We now ask, not indeed the character of this representation (which is sufficiently clear), but of what kind are those representations, about and upon which, the thought of the concept has been kindled. Do they remain apart, excluded from the light of the concept, obscure as before, that is, logically obscure? Does the concept illuminate only itself in a sort of egoistic satisfaction, without irradiating with its light the representations upon which it has arisen?

Logicization of the representations.

That would be inconceivable and contrary to the unity of the spirit; and indeed, such separation and indifference do not exist. The appearance of the concept transfigures the representations upon which it arises, making them *other* than they formerly were; from being indiscriminate it makes them discriminate; from fantastic, logical; from clear but indistinct (as

used to be said), clear and distinct. I am, for example, in such a condition of soul as prompts me to sing or to versify, and thus to make myself objective and known to myself; but I am objective and known only to fancy, so much so, that at the moment of poetical or musical expression I should not be able to say what was really happening in me: whether I wake or dream, whether I see clearly, or catch glimpses, or see wrongly. When from the variety of the multitude of representations, which have preceded and which follow it, I pass on to enquire as to the truth of them all (that is to say, the reality, which does not pass), and rise to the concept, those representations themselves must be revised in the light of the concept that has been attained, but no longer with the same eyes as formerly,—they must not be *looked at*, but henceforth, *thought*. My state of soul then becomes determinate; and I shall say, for example: "What I have experienced (and sung and made poetry of), was an absurd desire; it was a clash of different tendencies that needed to be overcome and arranged; it was a remorse, a pious desire," and so on. Thus by means of the concept is formed a *judgment* of that representation.

The individual judgment and its difference from the definitive judgment.

We have already studied the judgment, which is proper to the concept, and called it definitive judgment or judgment of definition. We have shown how in it there is no distinction of subject and predicate, so much so that it may be said, with regard to it, that there is neither subject nor predicate, but the complete identity of the two: a predicate or universal, which is subject to itself. However, the judgment which is now being discussed is not a simple definition and does not coincide with the first. It certainly has as its base a concept and therefore a definition; but it contains something more, a representative or individual element, which is transformed into logical fact, but does not lose individuality on that account; indeed it reaffirms its individuality with more precise distinction. This judgment is connected with the first, but it represents a further stage of thought. If the first form be a conceptual or *definitive* judgment, the second may be called an *individual* judgment.

Distinction of subject and predicate in the individual judgment.

Owing to this new element, which the individual judgment contains, and the judgment of definition does not contain, we eventually find fully justified in the former that distinction between subject and predicate which verbal Logic in vain claims to discover in all judgments,

including those of universal character (and even in simple propositions); so that it ends by attributing to that distinction, of which later we shall perceive the capital philosophical importance, a purely grammatical or verbal significance. Subject and predicate can be distinguished only in so far as the one is not and the other is universal, in so far as the one is not and the other is concept, that is to say, only in so far as the one is representation and the other concept. A particular or singular concept (for example, the will) is always also a universal concept; and therefore not adapted to function as a subject to which a predicate is applied; because that predicate, that universal, is already explicitly in the pretended subject itself which is not thinkable, save by means of that predicate. Only the *representation* can be truly *subject*; and only the *concept* can be *predicate.* This takes place plainly in the individual judgment, where the two elements are connected. "Peter is good," an individual judgment, implies the subject "Peter" and the predicate "good," the one not to be confounded with the other; whereas, in the definition "the will is the practical form of the spirit," "practical form" and "will" are identical.

Reasons for the variety of definitions of the judgment and of certain of its divisions.

When the attempt was made to define the judgment as differing both from the concept and from the definition, what was aimed at was the individual judgment. But, if this be so, then the definitions which conceive the judgment either as relation of representations or as relation of concepts (the subsumption of one concept under another, etc.), must be termed false, since it is henceforth clear that, as individual judgment, it must be conceived as a *relation of representation and concept.* On the other hand, some celebrated divisions of the judgment find their origin in the distinction made by us (which, we again repeat, is given at this point provisionally with the intention of seeking the definite formula further on), between the judgment of the concept and the judgment of the representation, between definition and individual judgment. In this way the *analytic* judgment, defined as that in which the concept of predicate was obtained from the subject, reveals itself as nothing but the definition, the identity of subject and predicate; the *synthetic* judgment, which adds to the subject something which was not there previously, is the individual judgment, logical thinking of the intuition, at first only intuited and not thought. We shall examine further on the true mean-

ing and the definite formula of this distinction also.

The individual judgment and intellectual intuition.

To ignore the form of the individual judgment, and to recognize only that of the concept and of the definition, is an impossible position, though occasionally there appears a tendency in that direction. We perceive it, for instance, in those who seek for definitions of everything, and limit themselves to syllogizing, when there is certainly a case for thinking, but also one for looking, or for thinking while we look, and for looking while we think. This may be said truly to represent knowledge, that complete knowledge in which all anterior forms unite, and which is the result of all of them. To know is to know reality; and knowledge of reality is translated into representations, penetrated with thought. That famous *intellectual intuition*, which has sometimes been described as the faculty to which man aspires, but does not possess, and sometimes as a prodigious faculty, superior to knowledge itself, should be declared, with the full rigour of letter and concept, to be nothing but the individual judgment; which is, in truth, intellectual intuition or intuited intellection.

But the individual judgment can take another name, much better known and more familiar:

perception; and perception, in its turn, should be called, synonymously, individual judgment, or at least *perceptive judgment.* Perception does not consist of opening the eyes, of offering the ear, and of unlocking any of the other senses, which are wont to be enumerated, nor, in general, of abandoning oneself to sensation. The world does not enter our spirit by these wide gates; but has itself announced, in order to be received with due honours. That good folk (and among the best of folk are to be counted many philosophers) think otherwise is in truth to be explained by their wonted neglect or lack of analysis and reflection.

Identity of the individual judgment with perception or perceptive judgment,

And further, perception is not intuition, *i.e.*, an impression theoretically fashioned, or that stage or moment of the spirit which is represented in an eminent degree by the poet, who intuites and does not know what he intuites, indeed does not know that he does not know (because the pertinent question has not arisen, and cannot arise, in him, as poet). To perceive means to apprehend a given fact as having this or that nature; and so means to think and to judge it. Not even the lightest impression, the smallest fact, the most insignificant object, is perceived by us, save in so far as it is thought.

Hence the supreme importance of the individual judgment, which is that which embraces all knowledge produced by us at every moment, by means of which we *possess the world*, by means of which a *world exists*.

and with the commemorative or historical judgment.

In perceptive judgments also, are comprised those judgments which are called by some *commemorative* or *historical*, that is to say, those by which it is recognized that a given fact has occurred in the past. This recognition can never be founded upon anything other than present intuitions, intuitions, that is to say, of our present life, which contains the past in it, and persuades us of the veracity of a given piece of evidence, as now apprehended by us. And conversely, all perceptive judgments are, in some way, commemorative and historical, because the present, in the very act by which we hold it before our spirit, becomes a past, that is to say an object of memory and of history.

Erroneous distinction of individual judgments as of fact and of value.

On the other hand, it would be erroneous to divide individual judgments, as has often been attempted, into judgments of *fact* and judgments of *value*, claiming that the judgment, "Peter is a man," is of a different nature from: "Peter is good." Every judgment of fact, in so far as it attributes a predicate to a subject, gives to it

a value, declaring it to participate in the universal or in a determination of the universal. And conversely, every judgment of value, in so far as it attributes a value, cannot attribute other than the universal or a determination of the universal, since outside the universal there is no value. Even judgments of negative form, such as: "Peter is not good," or "is not-good," or: "Peter is bad," are attributes of universality and of value; because, as we know, theoretically they do not affirm anything other than that Peter has a spiritual determination different from goodness (for example, that he is utilitarian, not yet moral). Certainly, in judgments such as these which we have selected as examples, there is mingled (this too has been noted; and at this point it suffices to recall it) the expression of an *ought to be*, which, in this case, is revealed in the negative formula adopted; but the expression of an ought to be or of a desire is not a judgment either of fact or of value; indeed, it is not a judgment at all; it is a mere proposition, a logos semanticos, not apophanticos, an optative or desiderative formula, a *lyricism* of the spirit directed to the future.[1]

There is no other cognitive fact to know,

[1] See above, Section I. Chap. VI.

The individual judgment as ultimate and perfect form of knowledge.

beyond perception or individual judgment. In this, the ultimate and the most perfect of cognitive facts, the circle of knowledge is completed. Obscure sensibility, having become clear intuition, and then having made itself thought of the universal, in the individual judgment is logically thought, and is, henceforward, knowledge of fact or of event, that is, of effectual reality. The individual judgment, or perception, is fully adequate to reality.

Error of treating it as the first fact of knowledge.

But precisely because perception is the completion of knowledge, it must be placed not at the beginning, but at the end of cognitive life. To place it at the beginning, as mere sensibility, and to derive from it the concepts, either as the effect of psychological mechanism, or by an arbitrary act of will, is the error of sensationalists and empiricists. To conceive it as judgment, and nevertheless to place it at the beginning, and to deduce from it the concepts by further elaboration, is the error of rationalists and intellectualists. Against these, it must be firmly maintained that the first moment of knowledge is *intuitive* and not perceptive; and that the concepts do *not originate* from the intellectual act of perception, but enter the act itself as *constituents*. To begin with perception,

understood as perceptive judgment, is to begin at the end, that is to say, with the most highly complex. Perception is thus the sole problem of gnoseology; but only because it is the whole problem, which contains in itself all the others. And it also is, if you like, the *first* form of the cognitive spirit, but not because it is the most simple, but precisely because it is the *last*; and the last, being also the whole, can also in an absolute sense be called first.

Origin of this error.

Certainly, the misunderstanding of the sensationalists and the opposing error of the rationalists contain an element of truth, since both are really concepts, which are developed from perception and presuppose it. But, on the other hand, they are not true and proper concepts, but pseudoconcepts, as we have already defined them, and these, being developed from perception, give rise, in their turn, to pseudojudgments. We shall treat of this further on; and thereby explain the genesis of the misunderstanding, that is to say, the erroneous theory will be overcome as misunderstanding and determined as truth. In this difference between individual judgments and individual pseudojudgments, between perceptions and pseudoperceptions, will also clearly be found

another of the motives (and perhaps the most profound), which have divided judgments into judgments of fact and judgments of value.

Individual syllogisms.

It is also easy to understand that, as there are individual judgments, so there are also individual syllogisms; or rather, that since it is not possible to distinguish between judgments and syllogisms in philosophical Logic, for they constitute one indivisible whole, so it is not possible to distinguish individual syllogisms from individual judgments, or it is only possible to do so verbally. "Caius is dead," is indeed the conclusion of a syllogism; since it is not possible to affirm that he is mortal without some reason: for example, because he is a man, an animal, or a finite being. Thus, the syllogism: "Men are mortal, Caius is a man; therefore, Caius is mortal," is only verbally different from "Caius is mortal." We do not say that the difference of words is nothing; there is always a spiritual difference, even when, instead of saying, "Caius is mortal," we say, "He, whom I call Caius, is mortal," or when the same thought is expressed in Latin or German. But being here occupied with Logic, we declare that there is none, because, indeed, there is none, *in point of difference of logical act*, both forms being the realization of logical reasoning alone.

V

THE INDIVIDUAL JUDGMENT AND THE PREDICATE OF EXISTENCE

The copula: its verbal and logical significance.

SUBJECT and predicate are indistinguishable in the judgment of definition, and distinguishable and distinct in the individual judgment; but the act of distinction (which is also union) between subject and predicate, representation and concept, is again, in the individual judgment, the same as the act of distinction and union, by means of which, in the judgment of definition, the concept is defined. In both cases thought makes essential what it thinks. In this respect there is no difference between the two forms of judgment, which we have analysed and have hitherto kept distinct for reasons of analysis. One identical act of thought distinguishes both from mere representation, in which there is wanting the "is" (logical and not verbal)—that "is," which belongs to the judgment of definition and to the individual judgment, and which in the second of these more

properly assumes the name of *copula*, because it unites two distinct elements, the one representative, the other logical. Here, too, of course, we must not allow ourselves to be deceived by verbalism. The essentialization, the copula, thought, cannot be made to consist of a word, which, abstracted from the whole, becomes a simple sound, and as sound can assume any other signification. In mere representation there can also be found the "is," or what, verbally and grammatically, is called copula, but there it has no value whatever as act of thought.

Nunc est bibendum, nunc pede libero
Pulsanda tellus

is a proposition which possesses the "is," but in this case it has merely the value of a sign, not of an act of thought, for that phrase of old Horace is nothing but the expression of a hortatory motion. The word, too, can be suppressed, but we do not thereby suppress the act of thought. The exclamation "beautiful!" uttered before a picture may be an individual judgment, having as subject the representation of the picture, and as predicate the æsthetic universal, which is called beautiful, in which the copula (and here, also, the subject) is verbally understood, but logically existent, and therefore always also capable of verbal reintegra-

tion. On the other hand, this reintegration cannot be effected when it is a case of a mere representation or an expression of a state of the soul; because, in that case, there would be, not a reintegration, but an integration, that is to say, it would carry out that act of thought, and produce that individual judgment which was not present before.

Questions concerning propositions without subject. Verbalism.

Thus, in asking a last question concerning the individual judgment, that is to say, whether it be always *existential*, we must, as always, transfer the enquiry from verbal to logical analysis, and not waste time with speculations as to words or fragments of propositions, arbitrarily torn from their context, and therefore insignificant and equivocal. The dispute has been most keen in relation to what are called propositions without a subject, such as "It rains" and the like. But, although we do not intend to negate the results, obtained or obtainable from these disputes, we cannot accept the position which they imply and which renders it possible to agitate and to discuss the problem to infinity and therefore makes it insoluble. "It is raining" said with a smile of satisfaction means: "Thank heaven, it is raining"; with a feeling of disappointment: "Bother the rain for preventing my taking a walk"; in

reply to some one asking what is the noise audible on the window-panes: "The audible sound is the sound of rain"; to contradict some one who says the weather is fine: "You are stating a falsehood and have not given yourself the trouble of observing; it is raining"; or it is the correction of an historical error. And so on. It is therefore waste of breath to dispute as to the logical nature of that proposition if its precise signification be not determined; and when it is truly determined (for the propositions we have substituted, taken abstractly, can also appear to have many senses and give rise to misunderstandings), we have quite abandoned the materiality of verbalism and passed to the thinking of spiritual acts, taken in themselves.

Confusion between different forms of judgments with relation to existentiality.

The question of existentiality in the act of judgment has been strangely confused, owing both to this verbalism and to the failure to keep distinct the judgment of definition and the individual judgment, and even the concept and the pseudoconcept. The question as to existence has been asked, as if it were the same in the case of a judgment of definition, like: "The Idea is," and in the case of an individual judgment like "Peter is." But in the first case, as we already know, existence coincides with essence,

and that judgment only says that the Idea is thought, and therefore is; whereas the second not only says that Peter is representable, and therefore is, but that he exists; Peter might be representable and not exist; the griffin is representable and does not exist. Pseudo-concepts have also been incorrectly adduced as examples of judgment of definition in such statements as: "The triangle is thinkable, but does not possess existence," or: "The genus mammifer is thinkable, but does not exist as single animals"; for in this case it should have been said that "triangle" and "mammifer" are not thought at all, but are constructed, and therefore have neither essence nor existence. For us, then, the question of existentiality cannot arise, either for the pure judgment of definition, which is a concept and has existence as a concept, that is to say, essence; nor for the definitive judgment of the pseudoconcepts, which is not even thought; but arises only for the individual judgment, into which there enters as a constituent a representative element, that is to say, something individual and finite. Essence does not coincide with existence in the individual and finite; indeed its definition is just this: the inadequacy of existence to essence. Therefore

the individual changes at every instant, and although being at every instant the universal, yet it is adequate to it only at infinity.

Determination and subdivision of the question of existence in individual judgments.

Having limited the question to the individual judgment, for which alone it has meaning, we can opportunely divide it into three particular questions: (i.) Does the individual judgment always imply that the subject of the judgment is existent? (ii.) What is the character of existentiality? (iii.) Does this character suffice to construct that judgment?

Necessity of the existential character in these judgments.

Beginning with the first, we believe that without doubt the answer is affirmative and that adherence should be given to those who have discovered and persistently defended the necessity of the existential character, thus contributing in no small degree to the progress of logical science. Whether what is represented exist or not, is doubtless indifferent to the intuitive man, to the poet or artist, simply because he does not leave the circle of representation. But it is not indifferent to the logical man, since he forms an individual judgment. He cannot *judge of what does not exist.*

It has been incorrectly objected that the logical judgment always remains the same, whether I have a hundred dollars in my pocket or only in my imagination; that a mountain of

gold is a subject of judgment, although hitherto at least no one has found one in any part of the earth; that Pamela is a virtuous woman (whatever Barretti may have written to the contrary), although she has never lived elsewhere than in the imagination of Richardson and of Goldoni. No predicate whatsoever can be attributed to a hundred dollars, to a mountain of gold, and to a Pamela which do not exist; and if it be said that those hundred dollars are exactly divisible by two or by five; or that that mountain of gold, imagined as of a certain base and height, is measurable in terms of cubic metres, and has a value of so many millions or milliards on the market; or that Pamela is worthy of esteem and of reward; it must be noted that neither the hundred imagined dollars, nor the imagined mountain, nor the imagined Pamela are judged with these judgments, but that the judgments define simply the arithmetical concepts of number, prime number and divisibility, or the geometrical concepts of the cube, and the economic concepts of gold as merchandise, or the moral concepts of virtue, esteem and reward. No judgment whatever has been given as to those non-existent facts, because where there is nothing the king (in this case, thought) loses his rights.

The absolute and the relative non-existent.

It will be replied that we talk at every moment about these non-existent things, and consequently judge them. But here care must be taken not to confuse absolute with relative non-existence, which latter is non-existent only in name. The absolutely non-existent is what is excluded from the judgment, implicitly in the affirmative formula, explicitly in the negative formula. To him who speaks of the mountain of gold, of the possession of a hundred dollars, and of Pamela as existing realities, we reply by denying these existences, that is to say, by denying them in an absolute manner; and of those negated existences it is not possible to judge, or even to talk, precisely because they are altogether negated. Here, in fact, we are speaking of the individual judgment, which excludes its contradictory from itself, as, for that matter, is also the case with the judgment of definition. But in that absolute affirmation and negation there is also made, explicitly or implicitly, a relative affirmation or negation; as when we say, in the examples given: "The mountain of gold, the hundred dollars, Pamela, do not exist," we say at the same time: "There do exist phantasms, products of the fancy or of the imagination, of a mountain of gold, of a

hundred dollars, and of a virtuous Pamela." Now the mountain, the dollars, and Pamela are, as such, not the absolutely non-existent, but certain facts, *subjects* of judgment, of which the predicate is expressed by the word "non-existent," which in this case is equivalent to "existing as phantasms." The absolutely non-existent is the contradictory, true and proper nothingness; the relatively non-existent (which is precisely that of the individual judgment) is an existence, *different* from that which the same individual judgment affirms.

Certainly relative non-existence, and the whole content of the concept of existence in general, would require more minute analysis; from which it would perhaps be seen that the so-called non-existent resolves itself into certain categories of practical facts; and thus designates sometimes *arbitrary constructions*, made by combining images for amusement or with some other intention; sometimes, on the contrary, the *desires*, which accompany every volitional act and are the infinite *possibilities* of the real. And it would also be seen that non-existence in the second sense, or the desires, which have been represented by art, are not in its circle in any way distinguished from effective volitions and actions;

since, in order to distinguish them, it would be necessary that art should possess a philosophy of the will, however summary, whereas art is without any philosophy. This examination would lead us, however, not only outside the problem now before us, but also outside Logic, to another part of Philosophy,[1] which, although closely related to Logic (as Logic to it), must be the object of special treatment if we do not wish to produce mental confusion by offering everything at once. This was the defect, for example, of G. B. Vico, who put all books into one book, the whole book into a chapter, and frequently his whole philosophy and history into a page or a period. The present writer, though proud to call himself a Vichian, does not propose to imitate the didactic obtuseness of that man of genius.

Suffice it to have made clear, as concerns the problem which now occupies us, that every individual judgment implies the existence of what is spoken of, or of the fact given in the representation, even when this fact consists of an act of imagination, that this act may be recognized as such and as such existentialized. It assumes a concept of reality, which divides into effective

[1] See the *Philosophy of the Practical*, pt. i. sect. ii. ch. 6.

reality and possible reality, into existence and non-existence, or mere representability. Some modern investigators of what is called the *theory of values* (students who fluctuate between psychology and philosophy, and between an antiquated philosophy and one that has the future before it) have maintained that a judgment of value cannot be pronounced when we are not dealing with an existing thing. Since for us a judgment of value is equivalent to any individual judgment, we must accept their thesis; freeing it from the embarrassment in which it finds itself in regard to *unreal images* (which yet give rise, as they themselves confess, to such judgments of value as the æsthetic) by observing that in that case there is the *effectuality*, the *reality*, or, in short, the *existence* of images, which have the *ineffectual* or *non-existent* as their content.

The character of existence as predicate.

We have in this way opened a path for the solution of the second question enunciated, which concerns the character to be assigned to the existentializing act of the judgment. Does this consist of an act of thought, that is to say, of the application of a predicate to a subject; or is it an original act of an altogether peculiar nature, which does not find its parallel in the other acts of thought? In short, is existence a predicate,

or is it not? The answer, already implicitly contained in the foregoing explanations, affirms that *existence* in the individual judgment is a *predicate*. And we say "in the individual judgment" because in the judgment of definition it is not predicate, for the reason already expounded, that in that judgment there is no distinction between subject and predicate, and that in it existence coincides with essence.

Critique of existentiality as position and faith.

The traditional reply is, on the other hand, that existence, in the judgment of existence, is not a predicate, but a knowledge *sui generis*, sometimes called a knowledge of *position*, sometimes an act of belief, or *faith*; two determinations, which are reducible to a single one. Because, if being is conceived as external to the human spirit, and knowledge as separable from its object, so much so that the object could be without being known, it is evident that the existence of the object becomes a position, or something placed before the spirit, given to the spirit, extraneous to it, which the spirit would never appropriate to itself unless it were courageously to swallow the bitter mouthful with an irrational act of faith. But all the philosophy which we are now developing demonstrates that there is nothing external to the spirit, and therefore there

are no positions opposed to it. These very conceptions of something external, mechanical, natural, have shown themselves to be conceptions, not of external positions, but of positions of the spirit itself, which creates the so-called external, because it suits it to do so, as it suits it to annul this creation, when it is no longer of use. On the other hand, it has never been possible to discover in the circle of the spirit that mysterious and unqualifiable faculty called *faith*, which is said to be an intuition that intuites the universal, or a thinking of the universal, without the logical process of thought. All that has been called faith has revealed itself step by step as an act of knowledge or of will, as a theoretic or as a practical form of the spirit.

There is therefore no doubt that existence, if it be something that is affirmed or denied, cannot be anything but a predicate; it can only be asked what sort of predicate it is, that is to say, what is the precise content or concept of existence, and this has already been indicated or at least sketched in the preceding explications. Objections have been made to the conceptual and predicative character of existence, such as that which maintains that if it were a predicate it would be necessary in the judgment "A is" to

be able to think the two terms—A and existence—separately, whereas in the thought of A, A is already existentialized. But these objections show themselves to be sophistical; because outside the judgment A is not thinkable, but only representable, and therefore without existentiality, which predicate it only acquires in the act of judgment.

Absurd consequences of those doctrines.

For the rest, the difficulties that befall those who conceive existentiality in the individual judgment as something *sui generis*, are illustrated by the theory to which they find themselves led, of a double kind of judgment, the existential and the categorical, without their being able to justify this duality. This is at bottom the most apparent manifestation of their more or less unconscious *metaphysical dualism*, which assumes an object external to the spirit, and makes the spirit apprehend it with an *act of faith* and afterwards reason about it with an act of *thought*. Why not always continue with an act of faith? Or why not also extend the act of thought to the initial judgment? We have either to continue upon the same path, or to change it altogether—this is the dilemma which imposes itself here.

But in rejecting the double form of the

individual judgment, the one existential, the other categorical, and in resolving both into the single form, which is the categorical by making existence a predicate among predicates, we must also explain for what reason (in reply to the third of the questions into which we have divided the treatment of existentiality) we now say that the predicate of existence does not suffice to constitute the judgment. How can it fail to suffice? If I say that "Peter is," or that "The Ægean is," have I not before me a perfect judgment? and is it not simply a judgment of existence? But here, too, we must repeat: *cave*; beware of the deceptions of verbalism; think of things, not of words. The judgments adduced as an example are so little judgments of existence that in them we speak of the "Ægean" and of "Peter," and since we speak of them, it is clear that we know that the Ægean, for example, is a sea, and what a sea is, and so on; that Peter is a man, and a man made in this or that way, an Italian and not a Bushman, thirty years old and not a month, and so on. The merely representative element cannot be found in the judgment by fixing it in a word, which, in so far as it forms part of the judgment, is, like all the rest, penetrated with logical character; and when we say that "Peter"

The predicate of existence as not sufficing to constitute a judgment.

is the subject and is representation, and "existing" is the predicate, we speak in a general sort of way and almost symbolically. If we are looking for the formula of the merely existential judgment in relation to a representation, that is, of a judgment which leaves the representation free from all other predicate save that of existence, such a formula could only be "*Something is.*" But upon mature consideration this formula would no longer be an individual judgment, since every logical transfiguration of the individual and every individual determination of the universal would not have been excluded: it would correspond neither more nor less than to a judgment of definition which asserts that "something" (something in general, indeterminate) "is" or that "reality is."

The predicate of judgment as the totality of the concept.

But our theory concerning the indispensability of other predicates in constituting the judgment is not to be understood as an affirmation of the necessity that any *other* predicate of any sort should be *added* to the predicate of existence, nor even that *all the others possible* should be added to it. In the first case, we shall always have an unjustifiable duality of predicates: that of existence and that necessary for essentializing and completing the judgment; in the second,

duality would certainly be avoided, since to constitute the judgment all the predicates would be necessary, without their distinction into a double order, and all would be qualitative predicates; but there would remain the idea of a successive addition of predicates. Granted this idea, it is impossible ever to understand what those acts would be, by which the first, or also the second, or also the third predicate, and so on, should be attributed, without yet attaining in such attributions the full totality of truth. They are representations no longer; and not yet judgments: they are then something insufficient and one-sided, whose existence could not be admitted save arbitrarily (as in Psychology), and which, therefore, would be inadmissible in Philosophy. It therefore only remains to conclude that in the judgment, all possible predicates are *given in one act* alone; that is, that the subject is predicated as existence, and for this very reason determined in a particular way; determined in a particular way, and for this very reason, as existence.

In other words, the concept which is predicated in the individual judgment is not and cannot be a fœtus or a sketch of a concept; but is the whole concept, in its indivisible unity, as universal,

particular and singular. And if existence seem to be a first predicate, the reason lies perhaps in this, that the concept of existence as actuality and action, and in its distinction from mere possibility, is perhaps the fundamental concept of the real, although on the other hand it is not truly thinkable save as determined in the particular forms of reality; hence that first predicate is first only in so far as it contains the last, that is to say, is neither last nor first, but the whole. To explain these statements is in any case, as has been said, the task of the whole of Philosophy, not of Logic alone, which here, as elsewhere, must rest satisfied with demonstrating the point that most closely concerns it; that is to say, the impossibility of separating from one another in the judgment, the predicates necessary for the determination of the reality of the fact, the absence of any one of which renders the judgment itself impossible.

VI

THE INDIVIDUAL PSEUDOCONCEPTS. . CLASSIFICATION AND ENUMERATION

Individual pseudo-judgments.

As pseudoconcepts imitate pure concepts and the corresponding judgments of definition, so by means of them are imitated pure individual judgments, and spiritual formations are obtained, which can be conveniently called *individual pseudojudgments.*

Their practical character.

The character of these pseudojudgments, like that of the pseudoconcepts, is not cognitive, but practical and more properly mnemonic. Fixing our attention upon certain examples of such judgments, if we say of an animal: "It is a squirrel," or "It is a platyrrhine monkey"; if we say of a house: "This house is thirty metres high and forty wide"; if of a painting we say: "The *Transfiguration* is a sacred picture," or "The *Danaë* is a mythological picture"; or if of a literary work we say, "The *Promessi Sposi* is a historical romance";—what have we learned as

to the true nature of the *Promessi Sposi*, of the *Transfiguration*, of the *Danaë*, of that house and of those animals? Upon close consideration, nothing at all. The animals have been put into one or another compartment or glass case, decorated with a name which might also be different from what it is, as the compartment and the glass case might also be different; the house has been compared in respect of its dimensions to other houses or to an object arbitrarily assumed as the unit of measurement, which is the metre, but which might be the foot, the palm, and so on; the two pictures and the literary work have been looked at from the visual angle of an arbitrary character, such as the mythological, religious or historical subject. As to what they truly are, as to how all these things came to be and to live, and as to their relation with other things and with the Whole, we have been silent. Their *value*, as it is called, remains unknown.

Genesis of the distinction between judgments of fact and judgments of value; and criticism of them.

This lack of all determination as to value, which is characteristic of individual pseudo-concepts, gives support to the distinction between judgments of *fact* (as individual pseudo-judgments are sometimes called) and judgments of *value*; a distinction which makes evident the further need of supplying the spirit with what the

first judgments do not give, that is to say, with the meaning or value of things. But since the individual pseudojudgments are not for us what they boast themselves to be, judgments of fact, we have no need to complete them with judgments of value; which would thus be themselves arbitrary (that is to say, conceived extrinsically to the determination of fact). True individual judgments are pure, and in them the universal penetrates the individual and the determination of value coincides with that of fact. In pseudojudgments there takes place no such penetration, but only the mechanical *application* of a predicate to a subject; so much so, that here is a true occasion for employing words which signify an extrinsic placing side by side, a reunion, combination or aggregation of subject with predicate.

Importance of the individual pseudojudgments.

Having made this clear, it is superfluous to repeat that we do not intend to remove, or even to attenuate, the due importance of individual pseudojudgments, as we did not remove or attenuate that of pseudoconcepts, when we defined them for what they are. And how can we deny their importance, if each one of us create and employ them at every instant, if each one of us strive to keep in order as best he can the patrimony of his own knowledge? It is easier for a

student to work without notes and memoranda than for any one not to make use of individual pseudojudgments. If I pass mentally in review the material that must go to form the history of Italian painting or literature, I must of necessity arrange it in works of greater or less importance, in plays and novels, in sacred pictures and landscapes, and so on; save when I wish to understand those facts historically, and then I must abandon those divisions. I must abandon them during that act of comprehension; but I must immediately resume them, if I wish to give the result of my historical research; and in this exposition it will be impossible for me to avoid saying that Manzoni, after having composed *five sacred hymns* and *two tragedies*, set to work upon a historical *romance*; or that *landscape painting* was developed in the seventeenth century. These words are necessary instruments for swift understanding, and only a philosophical pedant could propose to expel them. In like manner, if I wish to buy a house, I shall visit several houses and arrange them in memory, according to the situation, their arrangement, their size and other characteristics, all formulated in pseudojudgments. I shall have to abandon all of these in the act of choice, for then the house that I shall choose will

possess one only characteristic: that of being the one that suits my wants, that is to say, the one *that pleases me.* But I shall again have to employ those abstract characteristics, in my conversation with the person who sells it to me and in the contract that I make; there I shall speak, not only of my will and pleasure, but also of a house thirty metres high and forty wide, and so on. The same must be said of the squirrels and platyrrhine monkeys, which I cannot contrive to see in a museum or zoological garden, unless I describe them in that way; and I shall continue so to describe them, although those abstract characteristics have no definite value, either in permitting me to describe those animals with accuracy, or in making me understand their meaning in the universe, or in the history of the cosmos.

Empirical individual judgments and abstract individual judgments.

But in proceeding further to determine the differential characteristics presented by pseudo-judgments in contrast with individual judgments, it is necessary to consider them according to the double form, empirical and abstract, assumed by pseudoconcepts, thus distinguishing them as empirical individual judgments and abstract individual judgments.

In comparing empirical individual judgments

Process of formation of empirical judgments.

with pure individual judgments—for example, "The *Transfiguration* is a sacred picture," an empirical judgment, and "The *Transfiguration* is an æsthetic work," a pure judgment—the first thing to note is that the empirical individual judgment presupposes the pure individual judgment. We already know that pseudoconcepts, empirical or abstract, presuppose the idea of the pure concept; but that idea does not suffice for the formation of determinate empirical concepts, which can be employed as predicates of empirical judgments. We must not only think effectively these or those pure concepts, but they must be translated into individual judgments. Were this not so, where would empirical concepts obtain their material? Before the judgment: "The *Transfiguration* is a sacred picture," can be pronounced, we must first have the empirical concept of "sacred picture." Now this empirical concept (setting aside the fact that it presupposes other empirical concepts which we do not here take into account, because they would complicate the problem without aiding the solution that we wish to give) presupposes in its turn the pure concept of "æsthetic work"; and it is only when a certain number, more or less large, of artistic works have been recognized as such,

that is, when pure individual judgments concerning them have been formed, that we can abstract the characteristics and pass to the formation of the pseudoconcepts: sacred, historical, mythological pictures, landscapes, and so on. Having obtained these, then, and only then, when we stand before an æsthetic work, for example, the *Transfiguration*, and formulate again the pure individual judgment which recognizes it as such ("The *Transfiguration* is an æsthetic work"), are we enabled finally to apply the pseudoconcept and to pronounce the empirical judgment: "The *Transfiguration* is a sacred picture."

Its foundation in existence.

The consequence of the process here recognized as to the manner in which individual empirical judgments are formed, and in virtue of which they have pure judgments as their base, is that empirical judgments also in the last analysis are based upon the concept of existentiality. Pseudoconcepts of possibility are not formed, because possibilities are infinite, and it would be vain, or of no mnemonic use, to fix types of them. When, as sometimes occurs, such types seem to be formed outside of all existence, their appearance serves, not a mnemonic purpose, but a purpose of research.

This is the case with hypotheses and with other provisional methods of thought. But the empirical judgment is related to the individual or existential judgment, and it also employs pseudo-concepts of existential origin. For this reason, when giving examples of judgments of existence in the preceding chapter, we availed ourselves without scruple of empirical judgments also; for these obey the same law in relation to existentiality. "This animal is a monkey" implies, not only the existence of the animal taken as subject of the judgment; but also of that class of animals, of which the character has been abstracted, and the complex of characteristics which under the name of a monkey fulfil the function of predicate. An animal that does not exist and a class of animals that does not exist are not reducible to subject and predicate, and do not give rise to judgment of any sort.

Dependence of empirical judgments upon pure judgments.

Another consequence is that empirical concepts and judgments are continually originated and modified by pure individual judgments. The object of empirical concepts and judgments is to maintain the possession and the easy use of our knowledge; and this with no other end than that of serving as base for our actions, and thus also as a means of attaining new knowledge.

New knowledge is expressed in new pure individual judgments, which in their turn supply material for the elaboration of new empirical concepts and judgments. In this way empirical concepts and judgments must be and continually are renewed, by being dipped in the waters of pure individual judgments, true judgments of reality. From these waters they issue forth with youth renewed. If they do not do this, the worse for them: they fall ill, waste away and die. Given a rapid and profound revolution of thought, or, as it is also called, a transvaluation of all the values of life and reality, we should also have at once a no less rapid and profound transformation of all the empirical concepts and judgments previously possessed and employed. But this is continually occurring in the life of the spirit, if not in cataclysmic form, then in a more modest way. For example, who now employs the empirical concept of phlogiston, or forms judgments based upon it, now that we no longer admit the existence of that element, which was at one time believed to be separated from combustible bodies in the act of combustion? Who now says (save in jest) that such and such a syllogism is in *bramantip* or in *fresison*, or that a certain part of a speech is an *ornatum* or a

hypotyposis, now that we no longer believe the facts upon which such concepts of the old Logic and Rhetoric were based? Who still distinguishes human destinies according to the *conjunctions* of the stars that presided at birth, as was done when astrology was believed?

Empirical judgments as classification.

The empirical judgment, in so far as it applies a predicate to a subject supplied by the pure individual judgment, makes that subject *enter* that predicate, which is a *type* or *class*; and therefore it *classifies* the subjects of individual judgments. Thus we may also call empirical judgments, judgments of *classification*. This explains why the judgment has sometimes been considered to be nothing but a relation of subordination: for the empirical judgment does indeed subordinate a representation (which has first been logically determined by the individual judgment) to an empirical concept; that is, it places it in a class.

Classification and intelligence.

Classification is an essential function, for the reasons already given, which it would be useless to repeat; but to classify is not to *realize intellectually*, to understand, to grasp, to comprehend. If therefore, in life, we disapprove of those unmethodical people who detest classification, we do not disapprove any the less of the

perpetual classifiers, who content themselves with arranging things in classes, when on the contrary the needful thing is to penetrate their nature and peculiar value. It is a very common error to believe that something has been thoroughly understood and every problem relating to it completely solved, when it has simply been put into a drawer, that is, into a class. Thus in the not distant past, instead of establishing whether the *Promessi Sposi* were or were not an æsthetic work, and what movement of the spirit it represents, it was considered to be the duty of criticism to enquire whether that book were a romance or a novel, a historical or didactic romance, a historical representation of persons or of environment, and so on. The zoologist too, instead of studying the history and transformations of animals, their life and habits, limited himself to adding a rare specimen to a variety, or a variety to a subspecies, or a subspecies to a species, and believed that by so doing he had completely fulfilled the function of science.

Interchange of the two, and genesis of perceptive and judicial illusions.

The abuse of empirical or classificatory judgments is not less in relation to perception, which, as we know, is nothing but the series of individual judgments. It frequently happens that when

entering upon the discussion of real facts, and having in mind groups and series of pseudoconcepts, we hastily form empirical judgments, which take the place of pure individual judgments and are taken in exchange for them. From these exchanges have arisen certain famous controversies about the truth of perception, such as that indicated by the instance of the stick immersed in water, which seems to the eye to be broken, whereas it is whole and straight. The usual answer to such a view is that the error lies in the judgment, since perception as perception is never wrong. This answer is not altogether correct, since the perception is a judgment, and if the judgment is wrong, the perception also is wrong. On the contrary, the error is not in the judgment, but in the prejudice that the stick in question is in reality straight, and that when immersed in water the genuine reality is disturbed by a new element; as though the stick outside the water possessed greater or less reality than when immersed in the water. This error arises from the construction of the empirical concept of "stick," taken as a true and proper concept, so that when the stick is immersed in water and seems to be broken it seems not to answer to its true concept. Strictly speaking, the perception of the stick as broken or

otherwise altered is not less true than that of the straight stick; the absurdity, occasioned by the empirical concept, arises from seeking the true perception among various perceptions, in order to make of it the basis and foundation of the others declared illusory. This error would seem to be of slight importance, so long at least as it is a matter of a stick; but it entails most serious consequences, since it is owing to similar errors that outside the Spirit there has come to be posited *the Thing in itself.*

Abstract concepts and individual judgments.

Passing from the empirical to the abstract concepts, if these latter presuppose the pure concept, they do not on the other hand presuppose individual judgments. For example, in order to form the concepts of numerical series, or of geometrical figures, it is not necessary to know individual things. Those concepts are abstract, just because they are without any representative content, and therefore no representative element is required for their formation.

Impossibility of direct application of the first to the second.

But if this be so, it is clear that they cannot alone be translated into individual pseudojudgments. They will certainly give rise to judgments of definition (though always arbitrary and abstract), but not to individual judgments. And in truth numerical and geometrical series is not

applicable to individual facts, as affirmed in individual judgments. These are at the same time different and yet inter-connected, in such a way that the one is somehow in the other. The application of numerical series or geometrical figures implies that we have before us *homogeneous* objects (or objects which have been made homogeneous, which amounts to the same thing). Things qualitatively different elude such procedure: we cannot add up a cow, an oak, and a poem. It may be urged that all things have this at least in common, that they are *things* and can therefore be enumerated as such. But things, as such, or things in general are innumerable, being infinite; which amounts to saying that the series of things in general is the same as numerical series. Doubtless numerical series can be constituted; but our enquiry concerns the possibility of making direct applications of numbers to the individual; that is to say, whether or not they give rise to *abstract* individual judgments. We must reply to this question in the negative. The formula "abstract individual judgments" is itself a contradiction in terms; for the individual taken in itself can never be abstract, nor the abstract ever individual, even through a practical fiction.

The consequence of this demonstration is then

that if abstract concepts can be applied to individual judgments (and they are as a fact applied), there must be an intermediary which makes the application possible. The Individual empirical judgments are just such an intermediary. They reduce the heterogeneous to the homogeneous and prepare the ground for the application of the abstract concepts and for the formation of their corresponding pseudojudgments. These are therefore more correctly termed empirico-abstract judgments than individual-abstract judgments. Empirical and empirico-abstract judgments cannot then be presented as two co-ordinate classes of the individual pseudojudgment. They are two forms, of which the second is evolved from the first.

Intervention of empirical judgments as intermediaries. Reduction of the heterogeneous to the homogeneous.

The reduction of the *heterogeneous* to the *homogeneous* is effected by means of the procedure already discussed, by the formation of classes and classification with them as basis. Individual varieties, which escape all numerical application, are thus subdued, and we obtain in exchange things belonging to the same class, as for example oaks, cows, men, ploughs, plays, pictures, and so on. These things are finite in number (as we already know from our analysis of the representative elements contained in a determinate

empirical concept) and can therefore be numbered. Thus we can finally arrive at pronouncing the empirico-abstract judgments: "These cows number one hundred," "these oaks are three hundred in number," "there are four hundred houses in this village," "it contains two thousand inhabitants," "there are two ploughs in this field," and so on. Or we can say elliptically: "100 cows," "300 oaks," "400 houses," "2000 inhabitants," "2 ploughs," and so on, as is done in statistics and inventories.

Empirico-abstract judgments and enumeration (measurement, etc.).

If the procedure proper to individual judgments has been described as *classification*, that of empirico-abstract judgments is rightly called *enumeration*. Enumeration also makes possible another procedure, known as *measurement*, and what has been said by way of example about abstract concepts of number must be repeated *mutatis mutandis* of geometrical figures, which are employed as instruments of measurement. The procedure of measurement is somewhat more complicated; enumeration and measurement are related to one another as are arithmetical and geometrical concepts, but substantially they come to the same thing. The definition sometimes given of measurement can be extended to enumeration in general, namely, that it is *qualita-*

tive quantity, quantity applied to quality, strictly speaking, to quality rendered homogeneous by the process of classification. The empirico-abstract judgments are in fact qualitative-quantitative.

Enumeration and intelligence.

If classification does not imply understanding things and assigning to them their value, neither does enumeration imply intelligence and comprehension, because it consists of a manipulation, which is altogether extrinsic and indifferent to the quality of the things enumerated. That given objects are capable of enumeration or measurable as 100, or 1000, or 10,000 reveals nothing as to their character. It is only as the result of gross illusion that value is sometimes believed to be a function of number, and that value increases or diminishes with the increase or diminution of number. The common saying that number is not quality is a good answer to that illusion.

So-called conversion of quantity into quality.

A mental fact, afterwards called the transition from *quantity* to *quality*, or the conversion of quantity into quality, has certainly been known since ancient times. This transition finds a parallel in those logical diversions, in which, granted the admission, apparently as legitimate as it is slight, that by the removal of a single hair from the head of a luxuriantly haired individual, that individual does not become bald, or that by

the removal of a single grain from a heap, the heap does not disappear, one hair or one grain after another is removed, and he of the luxuriant locks becomes bald and for the heap is substituted the bare ground. But the error is in reality contained entirely in the first admission. A man with a head of hair or a heap of grain are what they are, so long as nothing in them is changed. The change of quantity is translated into change of quality, not because the first concept is constitutive of the second, but, on the contrary, because the second is constitutive of the first. Quantity has been obtained, measurement has been effected, by starting from quality, determined in the pure individual judgment and made homogeneous in the empirical judgment, which is the basis of the judgment of enumeration and of measurement. Thus quality constitutes the only real content of the abstract quantitative concept. By the taking away of the hair or the grain, *quality* itself is changed through the *quantitative formula.* That is to say, quantity does not pass into quality, but one quality passes into another quality. Quantity, taken by itself, as an abstract determination, is impotent in presence of the real.

Mathematical space and time and their abstraction.

A final observation, suggested by the difference between pure individual judgments (or judgments

of reality and value, if it please you so to call them), and quantitative or empirico-abstract judgments, is that the entire conception of things as occupying various portions of *space* and following one another in a *discontinuous* manner, *separated* from one another in *time*, is derived from the last type of pseudojudgments, namely the quantitative. It is an *alteration* effected for practical ends from the ingenuous view offered by pure perception. To show, as we have shown, the genesis of quantitative judgments and so of mathematical space and time, amounts to describing their nature and giving their definition. It amounts to revealing them as thoughts of *abstractions*, which are not to be confounded with real thought, or with genuine thought of reality. The Kantian concept of the *ideality* of *time* and *space* gives the same result. This doctrine is among the greatest discoveries of history, and should be accepted by every philosophy worthy of the name. In accepting it ourselves, we make but one reservation (justified by the proofs given above), namely, that the character of mathematical space and time should be called not ideality (because ideality is true reality), but rather *unreality* or *abstract ideality*, or, as we prefer to call it, *abstractness*.

THIRD SECTION

IDENTITY OF THE PURE CONCEPT AND THE INDIVIDUAL JUDGMENT THE LOGICAL *A PRIORI* SYNTHESIS

I

IDENTITY OF THE JUDGMENT OF DEFINITION (PURE CONCEPT) AND OF THE INDIVIDUAL JUDGMENT

Result of preceding enquiry: the judgment of definition and the individual judgment.

THE descent, as we have called it, from the pure concept to the intuition, or the examination of the relations which are established between the concept and the intuitions, when we have attained the first, and of the ensuing transformations, to which the second are subject, might at first sight seem complete. The concept, which was first contemplated in abstraction, has been demonstrated in a more concrete manner, in so far as it takes the form of language and exists as the judgment of definition. Further, we have shown how, when thus concretely possessed, it reacts

upon the intuitions from which it was formed, or how it is applied to them, as it is called, giving rise to the individual or perceptive judgment. The transition from the intuitions to the concept, and so to the expression of the concept or the judgment of definition, and from this to the individual judgment, has been followed and demonstrated in its logical necessity. Thus the two distinct forms are also united, the first being the presupposition and base of the second, so that the connection seems at first sight to be perfect. The judgment of definition is not an individual judgment; but the individual judgment implies a previous judgment of definition. To think the concept of man does not mean that the man Peter exists. But if we affirm that the man Peter exists, we must first have affirmed that the concept of man exists, or is thought.

Distinction between the two: truth of reason and truth of fact, necessary and contingent, etc., formal and material.

The distinction between the two forms, the judgment of definition and the individual judgment, is universally recognized. Not only can it be found, as has already been noted, in at least one of the significations which have been attached to the two classes of judgments, analytic and synthetic, but it is even more clearly expressed in the well-known distinction between *truth of reason* and *truth of fact*,

between *necessary truths* and *contingent* truths, between truths *a prori* and truths *a posteriori*, between what is *logically* and what is *historically* affirmed. Indeed, it is only on the basis of this distinction that it seems possible to give any content to the logical doctrine, which recognizes the possibility of propositions true *in form* and false *in fact*. This doctrine, as usually stated, is altogether untenable. It is impossible, above all, to maintain that formal truth can be distinguished from effective truth, always assuming that "form" is understood in its philosophical sense and not in that of formalist Logic, where it indicates an arbitrarily fixed externality, which, as such, is neither true nor false. It is therefore impossible to maintain that one and the same proposition can be true in one respect and false in another; for a proposition can be judged only from one point of view, which is that of its unique signification and value. But it is clear that once we admit the distinction between truth of reason and truth of fact, affirmations of both kinds might be found incorporated in the same verbal proposition, one of them false and the other true. For example, that the saying of Cambronne, "The Guard dies and never surrenders," is a "sublime saying" is formally (rationally) true, but

it is materially (as fact) false, because Cambronne did not utter those words. On the other hand, that the *Assedio di Fiorenze* of Guerrazzi is "a very beautiful book, because it inflamed many youthful bosoms with love of country," is materially (as fact) true, but it is formally (rationally) false, because the fact of its having produced such an effect is not proof of the beauty of a book, since beauty does not consist of practical efficacy.

Absurditics arising from these distinctions; the individual judgment as ultralogical,

Yet, notwithstanding the apparently glaring distinction between the judgment of definition and the individual judgment, between truth of reason and truth of fact; notwithstanding its secular celebrity and its confirmation by universal agreement and common usage, this distinction meets with a very grave difficulty. In order to understand it, we must, above all, establish clearly what we have just stated in positing that distinction and in making the individual judgment or truth of fact *follow* the judgment of definition or truth of reason. We have already posited a distinction of this kind between intuition and concept, and have noted that we have thus distinguished two fundamental forms of the Spirit: the representative or fantastic form, and the logical. Now, in positing as distinct the judgment of definition and the individual judgment,

do we mean to do something analogous? Do we mean to distinguish the logical form (concept or definition) from another form, no longer logical, although containing the logical form in itself as overcome and subordinate, in the same way that the concept contains in itself the intuition? In other words, is the individual judgment something *ultralogical*? It can certainly be asserted that it is not mere definition; but can it be asserted that it is not logical? The words used should not lead to misconception. If in the individual judgment the subject be a representation, it is also true that this representation is not found there as it would be found in æsthetic contemplation, but as subject of a judgment, and therefore not as a representation pure and simple, but as a representation thought, or made logical. Hegel has several times remarked that whoever doubts the unity of individual and universal can never have paid attention to the judgments which he utters at every instant. In these, by means of the copula, he resolutely affirms that Peter *is* a man, or that the individual (the subject) *is* the universal (predicate); not something different, not a piece or fragment, but just that, the universal. Further, are not truths of fact also truths of reason? Would it not be irrational to

think that a fact was not the fact it had been? The existence of Cæsar and of Napoleon is not less *rational* than that of quality and of becoming. And are not both kinds of facts equally necessary —those called contingent not less than those called necessary? We are right to laugh at those who like to think that things could have happened otherwise than they have happened. Cæsar and Napoleon are as necessary as quality and becoming.

or duality of logical forms.

It follows from these considerations (which could be easily multiplied) that the individual judgment is not less logical than that of definition. Truths of fact, contingent and *a posteriori*, are not less logical than those of reason, necessary and *a priori*. But if this be so, the distinction between the two forms would not be a distinction between forms of the spirit, but a subdistinction within the logical form of the spirit: a subdistinction of which we have already denied the possibility. For it is not clear how a logical thought, or thought of the universal, can be *two* thinkings, one in one way, one in another: one universal of the universal, the other universal of the individual. Either the first is void, or the second is improper. Intuition and concept are distinguished as individual from universal; but

that universal should be distinguished from universal by the introduction of individuality as element of differentiation is inconceivable.

Difficulty of abandoning the distinction.

The difficulty becomes greater from the equal inconceivability and impossibility of abandoning the result reached above, by which the individual judgment was shown to be possible only by means of a concept or judgment of definition. Every attempt that may be made to cancel that presupposition and to reconceive the individual or perceptive judgment as preceding the concept and being altogether without logical character, a mere assertion of fact, unenlightened by universality, must be considered, for the reasons we have given, to be entirely vain. If we cannot admit a duality of logical forms, still less can we admit that an alogical character, below the level of logic altogether, attaches to the individual judgment.

The hypothesis of reciprocal implication and so of the identity of the two forms.

There seems to be but one way out of such a difficulty: namely, to preserve the result attained, that is to say, the necessity of the judgment of definition as the presupposition of the individual judgment, but to affirm at the same time the necessity of the individual judgment as the presupposition of the judgment of definition. Admitting this supposition by way of hypothesis,

let us see what it would mean and what effect it would have in the discussion. Since the one judgment presupposes the other, and this presupposition is reciprocal, we could no longer talk of distinction between the two, but of unity pure and simple, of *identity*, in which distinction could arise only by abstraction and the arbitrary act of dividing what cannot exist save as indivisible. But, on the other hand, the distinction, although abstract, would always retain its value as a didactic means of making clear the true nature of the logical act. Thus we should justify our first proceeding to develop the concept and the judgment of definition, and then the individual judgment, and also the reservation that we have always made as to the provisional nature of such distinction, and thus also the new question as to the unity of the act, put and answered in the way proposed. All the difficulties arising from the appearance of a duality of logical forms would disappear. Definitions and individual judgments, truth of reason and truth of fact, necessity and contingency, *a priori* and *a posteriori*, would be revealed as one act and one truth. And we should also be justified in talking of them as distinct acts, for in expressing that single truth and single judgment verbally or in literature, we

can attach greater importance now to the definition, and now to the statement of fact; now to the subject, and now to the predicate.

Objection: the lack of an historical and representative element in definitions.

This path, which would offer such advantages and would constitute a true way out of the difficulty, seems, however, to be closed to us by the fact that in definitions there is no trace whatever of individual judgments which, on this hypothesis, would have to be contained within and be one with them. If we say "the will is the practical form of the spirit," or "virtue is the habit of moral actions," where is to be found in such statements the individual judgment and the representative element? We find in them without doubt the verbal form, expressive and representative, which is necessary to the concept for its concrete existence; but we do not find the statement of fact of which we are in search. Thus the proposed hypothesis will prove very ingenious and rich with all the advantages that we have stated; but since it does not appear to be confirmed by facts, we must, it seems, reject it, even at the risk of having to think out a better one, or, if we fail in this, of renouncing as desperate the attempt at a solution.

We must not, however, be in a hurry, but rather carefully recall the observation just made

incidentally: that the verbal or literary form can throw into *relief* a moment of the judgment, while casting a shadow over the other and causing it to be forgotten, without thereby ever being able to suppress it. There seemed, we remember, to be no trace of concepts in perceptive judgments or judgments of fact, and especially in those forms of them which are called merely existential and in those called impersonal. Yet there can be no doubt that none of those judgments is ever possible without the concept as basis. An analysis which does not allow itself to be arrested by appearances and examines verbal forms as regards both what they express and what they leave to be understood (though this too is expressed in its own way) has discovered it. Similarly a definition does not exist in the air, as might appear from the examples given in treatises, in which the *where* and the *when* and the *individual* and the *actual circumstances* in which the definition has been given are omitted. In a definition thus presented, it would certainly be impossible to discover a representative element and an individual judgment. But the reason for this is that it has been mutilated and made abstract and indeterminate, to such an extent that it can be made

The historical element in definitions, taken in their concreteness.

determinate only by the meaning which he to whom it is communicated likes to attach to it. If, on the contrary, we look at the definition in its concrete reality, we shall *always* find in it when we examine it with care the *representative element* and the *individual judgment.*

The definition as answer to a question and solution of a problem.

For every definition is the answer to a question, the solution of a problem. Did we not ask questions and set problems, there would be no occasion for giving any definition. Why should we give them? What need could there be? The definition is an act of the spirit and every act of the spirit is conditioned. Without contradiction, there can be no agreement; without the shock of multiplicity there can be no unity; without the travail of doubt that calls for peace, there can be no affirmation of the true. Not only does the answer presuppose the question; but every answer implies a certain question. The answer must be in harmony with the question; otherwise, it would not be an answer, but the avoiding of an answer. In reply to a question of a certain kind, we should turn our deaf ear, as the saying is, or reply with a blow. This means that the nature of the question colours the answer and that a definition taken in its concreteness is determined by the

problem which gives it rise. The definition varies with the problem.

Individual and historical conditionedness of every question and problem.

But the question, the problem, the doubt, is always individually conditioned. The doubt of the child is not that of the adult, the doubt of the uncultured man is not that of the man of culture, or the doubt of the novice that of the learned. Further, the doubt of an Italian is not that of a German, and the doubt of a German of the year 1800 is not that of a German of the year 1900. Indeed, the doubt formulated by an individual in a given moment, is not that formulated by the same individual a moment after. It is sometimes said by way of simplification, that the same question has been put by very many men, in various countries and at various times. But in the very act of saying this, we simplify. In reality, every question differs from every other question. Every definition, though it may seem to be the same and bounded with certain definite words, which seem to remain unchanged and constant, differs in reality from every other, because the words, even when they seem to be materially the same, are in effect different, according to the spiritual differences of those who pronounce them. Each of these is an individual, and on that account each finds

himself in circumstances that are individually determined. "Virtue is the habit of moral actions," is a formula which can be pronounced a hundred times. But if it be seriously pronounced as a definition of virtue each of those hundred times, it answers to a hundred psychological situations, more or less different, and is in reality not *one*, but *a hundred* definitions.

It will be replied that the concept remains the same through all these definitions, like a man who changes his clothes a hundred times. But (setting aside the fact that even the man who changes his clothes a hundred times does not remain the same) the truth is that the relation between concept and definition is not the same as that between a man and his clothes. No concept exists save in so far as it is thought and enclosed in words, or in so far as it is defined. If the definitions vary, the concept itself varies. There are, certainly, variations of the concept, of that which is, *par excellence*, self-identical. These are the life of the concept, not of the representation. But the concept does not exist outside its life, and every thinking of it is a phase of this life, never its overcoming, since however far we go, it is never possible to swim

outside water, or however high we climb, to fly outside air.

The definition as also historical judgment. Unity of truths of reason and of fact.

If we posit individual or historical conditions for every thinking of the concept, or of every definition (conditions which constitute the doubt, the problem, the question, to which the definition replies), we must admit that the definition, which contains the answer and affirms the concept, at the same time illumines by so doing those individual and historical conditions, that group of facts, from which it comes. It illumines, that is to say, qualifies it as what it is, grasps it as subject by giving it a predicate, and judges it. And since the fact is always individual, it forms an individual judgment. This means just that every definition is also an individual judgment. And this agrees with the hypothesis we framed: it is the assumption that seemed doubtful and now is proved. Truth of reason and truth of fact, analytic and synthetic judgments, judgments of definition and individual judgments, do not exist as distinct from one another: they are abstractions. The logical act is unique: it is the identity of definition and of individual judgment, the thinking of the pure concept.

Considerations confirming this.

Such a theory as this, although it goes against the ordinary way of thinking (though this, in its

turn, suffers from its own contradictions), can be made convincing even to ordinary thought, when it is led to reflect upon what is implicitly understood in any judgments of definition that are pronounced. For example, definitions have always in view some particular adversary; they change according to time and circumstances, and those definitions that we felt constrained to give, at one stage of our mental development, we abandon at another, not because we judge them to be erroneous, but because they seem to us to be inopportune or commonplace. These and other facts, easy to observe, would not be possible, unless judgment of definite situations intervened to produce the change. And this judgment, though we may try to think of it as preceding or as following each one of those acts of definition, in reality neither precedes nor follows them, but on the contrary presents itself to the mind as contemporaneous, or rather coincident and identical with the act of definition. Every one who attains to a conceptual truth, every one, for instance, who achieves a definite doctrine of art or of morality, is immediately aware in himself that henceforth he knows more adequately not only the kingdom of ideas but also the kingdom of things. He realizes that as

soon as an idea becomes more clear *ipso facto* it makes clearer the things out of whose vortex and tumult it comes. The star-gazer who forgets the earth, will be an astronomer, but certainly not a philosopher. In the act of thought, in the world of ideas, earth and sky are fused in one. Whoever looks well at the sky, sees in it (miraculously!) the earth.

For the rest, the identity of definition and individual judgment, which we have demonstrated by various processes that are usually called negative, hypothetical, or inductive and based upon observation, is also confirmed by the process called deductive. For if the thinking of the concept be a degree superior to pure representation, and if in the degrees of the spirit the superior contain in itself the inferior, it is evident that representation as well as conceptual elements must always be found in the concept. But it is also evident that we can never find them distinct or distinguishable, but mingled in such a way that every distinction in them must be introduced solely by a deliberate act. The logical act is certainly spoken, represented, individualized. But when it is split up into concept and individual judgment, one of two things must happen: either we make an empirical and

external distinction, of more or less; or two monstrosities are asserted: a non-individualized concept, which therefore does not exist, and a judgment not thought, and therefore non-existent as judgment, and existing, at the most, as pure intuition.

Critique of the false distinction between formal and material truths.

As our distinction between definitions and individual judgments was provisional, so also we must regard the consequence that we showed to issue from it—the partial justification of the doctrine of affirmations formally (logically) true and materially (individually) false. In reality, an error of fact implies a more or less inaccurate and erroneous definition, and an error of definition implies an error of fact. Thus this distinction also retains only an empirical meaning useful for the rough distinction of certain classes of errors from certain others. And resuming another previous observation, we must also say that, strictly speaking, it must be held impossible to err as to facts through the use of pure concepts, since the penetration of concepts, however great one may think it, is also always penetration of facts. This formula, too, cannot have anything but an empirical meaning, to indicate a certain type of errors of concept and of fact, which is popularly called the use of concepts and the use of facts, whereas it is the abuse of both.

Platonic and Aristotelian men.

In ordinary life it is customary to distinguish between those who cultivate ideas and those who cultivate facts, between *Platonic* and *Aristotelian* men. But if the Platonists seriously cultivate ideas, they cultivate facts and are also Aristotelians, and the Aristotelians cultivate ideas and are Platonists. Here, too, the difference is practical and extrinsic, not substantial; so much so that we are often astonished both at the singular clear-sightedness and penetration of the actual situation manifested by cultivators of ideas, and at the profound philosophy which we discover in the pretended cultivators of facts.

Theory of the application of the concepts, true for abstract concepts and false for pure concepts.

Hence the further consequence, that we must avoid the formula which speaks of the *application* of concepts, as, for instance, that in the individual judgment the concept is applied to the intuition. To say this, is, as a saying, innocuous, since like many others, it is metaphorical; but the doctrine implied in it, or that may be suggested by it (and that is indeed rarely separated from it), is altogether erroneous. The concept is not applied to the intuition, because it does not exist, even for a moment, outside of the intuition, and the judgment is a *primitive act* of the spirit, it is the logical spirit itself. If that formula has been successful, the reason for its success must usually

be sought in the theory of the pseudoconcepts. Even these, in relation to the question which engages us now, and in so far as they are empirical concepts, are indistinguishable from individual pseudojudgments. To construct an empirical concept is equivalent to pronouncing that the objects *a*, *b*, *c*, *d*, etc., belong to a definite class. The two acts of the construction of the class and of effectual classification are only to be distinguished in an abstract manner. In conformity with this, we must now correct the theory that we have given above. But on the other hand, in so far as they are abstract concepts, they are void of all representative content, and therefore constituted outside of every individual judgment. They cannot of themselves give rise to such judgments. Before they can be united to them, we must *apply them* to individual judgments, elaborated into pseudojudgments, or made homogeneous by the process of classification. And in truth, not only the doctrine of application, but also the distinctions between analytic and synthetic judgments, between definitions and perceptions, between truths of reason and of fact, between necessity and contingency, find their confirmation in being referred to abstract concepts, as distinct from empirical. The same

may be also said of the other doctrine, which distinguishes between affirmations that are formally true and materially false. Two griffins plus three griffins make five griffins. This is formally true, since it is true that two plus three equals five; but it is materially false, because griffins do not exist. Numbers and their laws would, for example, be truths of reason, necessary, *a priori*, in analytical judgments and pure definitions; truths derived from experience would be truths of fact, contingent, *a posteriori*, in synthetic and individual judgments. But though this conception may have currency in a field where, properly speaking, there is neither thought nor truth, in the field of truth and of thought the terms of both series are found in the corresponding terms of the other. Analysis apart from synthesis is as unthinkable as synthesis apart from analysis. In the same way we can empirically distinguish intention and action in the practical spirit. But in reality pure intention outside effectual action, is not even intention, because it is nothing. And an action beyond and without intention is nothing, for practical reality is the identity of intention and action. Here, too, theoretical spirit and practical spirit correspond at every point.

II

THE LOGICAL, *A PRIORI* SYNTHESIS

The identity of the judgment of definition and of the individual judgment, as synthesis a priori.

IF analysis apart from synthesis, the *a priori* apart from the *a posteriori*, be inconceivable, and if synthesis apart from analysis, the *a posteriori* apart from the *a priori*, be equally inconceivable, then the true act of thought will be a synthetic analysis, an analytic synthesis, an *a posteriori-a priori*, or, if it be preferred, an *a priori synthesis*.

In this manner, the identity that we have established between the judgment of definition and the individual judgment comes to assume a name celebrated in the annals of modern philosophy. And by assuming it at this point, it is also able to affirm, since it has already demonstrated, the truth of the *a priori* synthesis, and to determine its exact content.

This is not the place to enter again into the objections which the Kantian concept elicited (indeed could not fail to elicit): objections which

in Italy too gave rise to very acute attempts at confutation, and which ended in the partial absorption of that concept into the mental organism of its opponents. Suffice it to say that all the objections to the *a priori* synthesis, when thoroughly examined, seem to be derived, as was to be expected, from the upholders of the two one-sided doctrines which were surpassed by the synthesis. Thus the dogmatists or abstractionists believed the concept to be thinkable apart from or above the facts (simple analysis); the empiricists perceived only the representative element and claimed to obtain the concept from mere facts (simple synthesis). Both failed to explain perception, or the individual judgment. The former found it to arise from the external and almost accidental contact between pure concepts and given facts; the latter sometimes assumed it without explanation, sometimes confused it with pure intuition, if not altogether with sensibility and emotion. It can be said that whoever does not accept the *a priori* synthesis is outside the path of modern philosophy, indeed of all philosophy. Strive to find or to rediscover that path, unless you wish to incur the punishment of trifling with empiricism, of lying to yourself with

Objections raised by abstractionists and empiricists against the a priori synthesis.

mysticism, or of wandering in the void with scholasticism.

False interpretation of the a priori synthesis.

Instead of noting and of examining all the objections made to the *a priori* synthesis (which we have already substantially discussed in the development of our treatise), it will be of assistance to add some explanations, which will prevent false interpretations of that concept. These false interpretations sometimes (as often happens) mingle with the true even in the philosopher who discovered it, and confer force and authority upon several of the objections to the very reality of the *a priori* synthesis.

A priori synthesis in general and logical a priori synthesis.

In the first place, in accordance with the formula given in Logic we must not speak of the *a priori* synthesis in general, but of the *logical a priori synthesis.* The *a priori* synthesis belongs to all the forms of the Spirit; indeed, the Spirit, considered universally, is nothing but *a priori* synthesis. The synthesis is operative in the æsthetic activity, not less than in the logical. For how could a poet create a pure intuition, if he did not proceed from a given fact, from some passionate moment of his own, conditioned and constituted in a particular way? Without something to intuite and to express could there ever be a poet? And would he be

a poet, if he were to repeat that something mechanically, without transforming it into pure intuition? In his pure intuition, there is and there is not matter: not as brute matter, but as formed matter, or form. Thus it is said with reason that art is pure form, or that matter and form, content and form, in art are wholly one (*a priori* æsthetic synthesis). The *a priori* synthesis is not less operative in the practical activity than in the æsthetic and logical (that is, in the theoretic activity). It is impossible to will without material to will, or to will outside the given material. The practical man accepts actual conditions, and at the same time transforms them with his volitional act, creating something new, in which those conditions are and are not. They are, because the action achieved is in relation to them; they are not, because being new, it has transformed them. *A priori* synthesis, in general, then, means spiritual activity; not abstract but concrete spiritual activity, that is to say, the spirit itself, which is *condition* to itself and *conditioned* by itself. Thus the *a priori* synthesis, which is constituted by the coincidence or identity of the judgment of definition with the individual judgment, is not *a priori* synthesis in general, but logical *a priori* synthesis.

Non-logical a priori syntheses.

Having clearly established this point we are enabled to eliminate the confusion caused by the citation of certain spiritual formations, which do not correspond with that logical act, as examples of *a priori* synthetic judgments. Such for instance is the case of the famous example: "5+7=12," concerning which it was long disputed whether it were an *a priori* synthetic judgment or simply analytical; the synthetic element being found or not found in it, according to the point of view. The same thing has occurred in the case of other examples of a different nature, as in the judgment: "Snow is white." Here the dispute has been as to whether it be *a priori* synthetic, or simply synthetic. The truth is, on the contrary, that in neither of these two cases is there *logical a priori* synthesis, because the judgment "5+7=12" is the expression of abstract or numerical concepts, and "snow is white" is the expression of empirical or classificatory concepts. This amounts to saying that both are products, not of a logical nature, nor of a theoretic nature, but, as we know, of an arbitrary or practical nature. For this reason, we have denied the very possibility of simply analytic or simply synthetic judgments in pure logic. On the other hand,

both these kinds of spiritual formations are *a priori* syntheses, precisely because, being spiritual formations (though of a practical nature), they cannot fail to be produced by a creative (synthetic) act of the spirit. This explains why they sometimes appear as *a priori* syntheses, sometimes as something altogether different from the *a priori* synthesis. It suffices to add to the affirmative solution the adjective "practical" and to the negative the adjective "logical" to obtain agreement and truth.

The a priori synthesis, as synthesis, not of opposites but of distincts.

A question of no less importance is whether the logical *a priori* synthesis (we might say, the *a priori* synthesis in general) is to be conceived as a synthesis of opposites; if, in other words, intuition and concept, matter and form, exist in the *a priori* synthesis in the same way as Being and not Being exist in true Being, which is Becoming; or as good and evil, true and false, and so on, exist in the special forms of the Spirit. The affirmative reply to this question finds, as is well known, its chief representative in the doctrine of Hegel. We do not wish to deny the great truth contained in this doctrine, in so far as by considering the *a priori* synthesis as a synthesis of opposites, it insists upon this essential point: that intuition and concept

matter and form, do not exist in the logical act as two separable elements, merely externally connected. Outside the synthesis the subject does not exist as subject, and the predicate does not exist in any way. We must banish altogether the idea of the *a priori* synthesis, conceived as the reuniting of two facts existing separately. But having recognized the true side of the doctrine, we must correct the inexactness it contains. This arises from the confusion already criticized, by which the relation of opposition is unduly extended to distinct concepts, and the unity of effectual distinction is confused with the dialectic unity, which declares itself synthetic, only in so far as it makes war against an abstract distinction.[1] The *a priori* synthesis is a unity of distinct concepts and not of opposites. That which is the material of the logical synthesis and which outside it has no logical character (is not subject), yet in another and inferior grade of the spirit is form and not matter, and is called intuition. Hence, there is distinction and unity together; form is not without matter; but the new matter was already form and, therefore, had its own matter. The logical *a priori* synthesis presupposes an æsthetic *a priori* synthesis. When

[1] See above, Sect. I. Chap. VI.

considered in the logical sphere, this is certainly no longer a synthesis, but an indispensable element of the new synthesis. But outside the logical sphere, it possesses its own proper and peculiar autonomy. In the logical act intuition is *blind* without the concept, as the concept is *void* without the intuition. But pure intuition is not blind, because it has its own proper intuitive light. The concept contains the intuition, but the intuition transfigured. It is a synthesis, not of itself and its opposite, but of itself and its distinct concept which is indistinguishable from itself, save by an act of abstraction. In this way we satisfy the demand expressed in the formula of the synthesis as unity of opposites, and at the same time repress its tendency to usurpation. This tendency leads to the rejection of the concept of æsthetic synthesis, in favour of the concept of logical synthesis ; it means the negation of art by philosophy, not only in the philosophical field (which would be just), but in the whole spiritual field. Extending itself from this to other usurpations and led on by the mirage of an ill-understood unity, it claims all the other syntheses for logical synthesis, and produces a great spiritual desert, in which logical thought itself at length dies of starvation.

The category in the judgment. Difference between category and innate idea.

The logical element, the pure concept or judgment of definition considered in itself, is given the name of *category* in the logical *a priori* synthesis. This term is nothing but the Greek equivalent for the word "predicate," which we have hitherto employed. It has been asked if the category is what used to be called an *innate idea.* The answer must be that it is both that and also something profoundly different. The innate idea was indeed the category, but the category taken as possessed and thought *prior* to experience, according to the view that we have described as abstract or dogmatic. First the music, then the words; first definitions, then individual judgments or perceptions. The category, on the contrary, is neither the mother nor the first-born. It is born at one birth with the individual judgment, not as its twin, but as that judgment itself. From this aspect the category or the *a priori* is not the innate, but the perpetually new-born. From this we see the vanity of the question, whether the judgment or the concept be logically *prior*, not only in the relation, which we have already examined, of concept with verbal form (judgment of definition), but also in the relation of concept with individual judgment. We can say in-

differently that to *think* is to *conceive*, or that to *think* is to *judge*, because the two formulæ are reduced to one. Equally vain is the question as to whether the categories precede the judgment or are obtained from it. They not only do not precede the judgment, but are not even obtained from it. We never issue forth from the judgment, as we never issue forth from reality and history.

The a priori synthesis, the destruction of transcendency, and the objectivity of knowledge.

A final explanation, not less important than those already given, concerns the *importance* of the logical *a priori* synthesis. This too has been diminished by the very man who discovered and defined that mental act, and even more by those who have repeated him, without being capable of reviving again the moment of discovery, and of understanding the intimate reasons that brought it about. When the concept was placed outside and prior to the representative element, and thought prior to and outside the world, so that the former was applied to the latter, the world was bound to appear to be something inferior to the concept, a degradation or an impure contact, which thought had to undergo. When, on the other hand, the representative element was placed outside and prior to the concept, the latter seemed to be

inferior to it, almost as though it were an expedient for taking hold of the world, without truly being able to do so, and thus in its turn a degradation or defilement of it. Hence the sigh that we hear already in antiquity and more strongly in modern times: oh, if *words* (that is to say *concepts*, because concepts were called words) were not, how directly should we apprehend things! Oh, if *thought* were not, how vigorously should we embrace genuine reality!

In the first instance, reality is inferior to the concept, in the second the concept to reality; but in both alike, the two elements are always thought — as mutually external and truth as undiscoverable. Thus both these one-sided tendencies end in mystery. According to the former, the world is created by a God external to it, and will be disintegrated when it shall seem good to him, while the latter holds that the truth of things is plunged in impenetrable darkness. But granted the idea of the *a priori* synthesis, reality is not inferior to thought nor thought to reality, nor is the one external to the other. Representations are docile to thought, and thought conceals representations even less than the tenuous and scanty veil concealed the beauty of Alcina. The interpenetration of the

two elements is perfect, and they constitute unity. The false belief in the externality and heterogeneity of reality and thought can only arise when for the pure concept and the *a priori* synthesis there are substitutes, either abstract concepts with their related analytic judgments, which are void of all representative content, or empirical concepts with their related and merely synthetic judgments, which are without logical form. The value of the *a priori* synthesis lies in its efficacy in putting an end to doubts as to the *objectivity* of thought and the *cognizability* of reality, and in making triumphant the power of thought over the real, which is the power of the real to know itself.

Power of the a priori synthesis never known to its discoverer.

But this efficacy of the *a priori* synthesis remained obscure to its discoverer (and most obscure to his orthodox followers). To such an extent was this the case, that even to Kant the category did not seem to be immanent in the real and to be the thinking of its reality, but an extrinsic, though necessary adjunct, an inevitable alteration introduced into reality to make it thinkable, an anticipatory renunciation of the knowledge of genuine reality. Reality itself lay outside every category and judgment, a *thing in itself*. Even in Kant, the *a priori*

synthesis was confused with simple analysis and with simple synthesis. These being manipulations of the real, extrinsic and not intrinsic, practical and not logical, useful, but without truth, so the *a priori* synthesis appeared to him to be an expedient to which man has recourse and cannot but have recourse, but which constitutes, not his power, but his weakness. Kant, too, dreamed of an ideal of knowledge, which was not *a priori* synthesis, but the *intellectual intuition*, the perfect adequacy of thought to reality, unattainable by the human spirit. He did not perceive that the intellectual intuition, which he longed for as an impossible ideal, was precisely the continuous operation of the *a priori* synthesis, nor did he think that what is necessary and insuperable cannot be defective. He never knew that the *a priori* synthesis, which he had discovered, is alone the true concept and the true judgment, and, therefore, operates in an altogether different way from simple analysis and simple synthesis, which are neither concept nor judgment; nor finally that if these last postulate a *thing in itself*, the *a priori* synthesis cannot postulate it, because it has *it in itself*.

To understand all the richness of the *a priori* synthesis is to pay honour to the genius of

Emmanuel Kant; but it is also to recognize that the systematic construction of Kant showed itself altogether unequal to the great principle he laid down, but whose value he insufficiently estimated.

III

LOGIC AND THE DOCTRINE OF THE CATEGORIES

The demand for a complete table of the categories.

WHEN the definition of the *a priori* synthesis and of the category has been attained, it is usual to demand of logical Science (and this will be demanded also of our exposition) that it should say how many and of what sort are the categories, how they are connected among themselves, *i.e.* that it should draw up a *table* of them.

A request extraneous to Logic. Logical and real categories.

Logic, in our opinion, should reject this demand, the origin of which lies in the confusion between thought in general and thought as the science of thought. The categories are certainly affirmed in the individual judgment, but Logic, as the science of thought, does not undertake to formulate judgments which will say what are the predicable terms, the ultimate or pure concepts, the categories, with which reality is thought. Logic cannot claim to substitute itself for the other philosophic sciences and itself to solve all the problems which offer themselves to thought

as to the nature of reality. Its scope is to define categories and to formulate judgments *only on that aspect of Reality, which is logical thought.* It is, therefore, under the obligation to face the question as to whether there be logical categories, supreme concepts or supreme predicables from the point of view of logic, and if there be, to indicate and to deduce them. It is not obliged to indicate and to deduce all the supreme predicables and categories.

The uniqueness of the logical category: the concept.

Now we have already treated of the question as to the categories of Logic and have solved it, partly affirmatively, partly in the negative. That is to say, we have denied to Logic a multiplicity of categories, since the three fundamental categories, usually given as concept, judgment, and syllogism, have been revealed to be identical. The others, derived from formalist Logic and relating to classes of concepts, to forms of judgments and to figures of the syllogism (and even these three preceding, if they are taken as separable or distinguishable), have been shown to be empirical and arbitrary. Finally, those that were based upon the gnoseology of the pseudoconcepts have shown themselves to be extraneous to pure Logic. On the other hand, we have affirmed the category proper to Logic,—the unique category

to which it gives rise. It has been defined as the pure concept, at once judgment of definition and individual judgment, the logical *a priori* synthesis. Thus the enquiry can be looked upon as exhaustive as regards this part of the subject.

The other categories. No longer logical, but real. Systems of categories.

A glance at the tables of categories that have appeared in the course of the history of philosophy, from that of Aristotle, which is the first, at least among the conspicuous, to that of Stuart Mill, or if it be preferred, to the Kategorienlehre of E. von Hartmann, which is the last, or among the last, shows at once that the other categories, which have been described as logical categories, can be reduced to verbal variants of this unique one of the pure concept, or belong to other aspects of the spirit and of reality, as distinct from that of logical thought. For if in the Aristotelian table the *οὐσία* and the *ποῖον*, substance and quality, to some extent denote the subject and the predicate of the judgment, that is to say, the abstract elements of the *a priori* synthesis: the *πόσον*, on the other hand, appeals to the processes of enumeration and of measurement, the *ποῦ* and the *ποτέ* to the determination of space and time, the *ποιεῖν* and the *πάσχειν* to the principles of practical activity, and so on. The Kantian table seems to refer, or to mean to refer,

to logical thought; but that does not prevent the appearance in it of traces of the principles of mathematical, naturalistic, heuristic, and other processes. Furthermore, in the Kantian philosophy, the whole system of the categories is to be deduced, not from the transcendental Logic alone, but also from the transcendental Æsthetic (space and time), and from the Critique of Practical Reason and Judgment, which all lead to functions or forms, operating as spiritual syntheses and reappearing as categories in judgments. Finally, we must not neglect the Kantian metaphysical categories of Physics.

The Hegelian system of the categories and other later systems.

All this becomes clearer in the doctrine of Hegel, where the categories are not only those of logical thought or subjective thought, concept, judgment, syllogism; but also those of quality, quantity and measure, essence, phenomenon and reality, with their subforms and transitions, and those of the objective concept, mechanism, chemism, and teleology, and those of the Idea, life, knowing, and the absolute Idea. The Hegelian, Kuno Fischer, makes certain declarations in his *Logic* to which it is expedient to give heed. Following the example of the master, he was induced to include knowing and willing among the categories; "It may at first sight

seem strange (he says), that knowing and willing should appear here as logico-metaphysical concepts, as categories. Knowledge has need of categories; but is knowledge itself a category? Willing belongs to Psychology and Morality, not to Logic and Metaphysic. It seems, then, that the categories lose themselves now in Physics or Physiology, by means of concepts such as those of mechanism and organism, now in Psychology and Ethics, with the concepts of knowing and of willing. Objections of this sort have often been made. We have shown that the concept must be thought as object, and that the concept of object demands that of mechanism: the justification of the thing resides in this proof. Willing and knowing are indeed categories. If the test, by which we recognize the categories, consists in that they are valid, not only for certain objects, but for all, and in that they should express the universal nature of things, it is not difficult to see in what a profoundly significant way knowing and willing emerge triumphantly from such a test. They belong not only to what are called the faculties of the human spirit, but in truth to the *very conditions of the world.* If the world must be understood as end it must also be understood as

willing; for the end without the willing is nothing. . . . If knowing and willing were only a small human province of the world, they would certainly not be categories. Their concept would belong not to metaphysic, but to the anthropological sciences. Since they are, on the contrary, both of them cosmic principles, universal concepts, without which the concept of objects and of the world cannot be thoroughly thought and known, for that reason they necessarily have the value of categories. And since, in truth, they compose the concept of the world, they are the supreme categories."[1] This argument amounts to saying, that whenever a concept is truly universal (not restricted to this or that class of manifestations of reality and therefore empirical), whenever a concept is a pure concept, it is always a category. This thesis is most exact, but it amounts to excluding such a search from pure Logic, which does not give the concepts or concept of reality, but only the *concept of the concept.* The attempt of Hegel to embrace the totality of the categories was not understood and was abandoned at a later date, and a return was made in some sort to the categories of the theoretic and practical—theoretic spirit alone—(von Hartmann gives them

[1] *Logik*, pp. 532-3.

in his fundamental tripartition of the categories into sensibility, reflective thought and speculative thought). But the tendency to totality reappeared, in an elementary form, in Stuart Mill, who opposed to the Aristotelian table his own, divided into the three classes of *sentiments* (sensations, thoughts, emotions, volitions), of *substances* (bodies and spirits), and of *attributes* (quality, relation, quantity): a vertiginous regression to an infantile conception, which yet sought to embrace in its own way the whole of reality.

The logical order of the predicates or categories.

The doctrine of the categories has been introduced and retained in Logic, not only because of the confusion between the thought of thought and thought in general, which has just been explained, but also because of another confusion, which must now be explained, as it has far deeper roots and far greater importance. It has been and may be argued in this way. It is true that the categories are nothing but simply the concepts of reality; but these concepts, acting as predicates, are presented in logic in a necessary order, which it is the task of logical Science to deduce. In determining reality by means of thought, we begin with a first predicate, for instance *being*, judging that reality is. This judgment immediately shows itself insufficient, whence

it becomes necessary to determine it with a second predicate and to judge that reality both is and is not, or is *becoming*. This predicate of becoming appears in its turn vague and abstract, and it becomes necessary to determine reality as *quality*, then as *quantity*, *measure*, *essence*, *existence*, *mechanism*, *teleology*, *life*, *reflexion*, *will*, *idea*, in short with all the predicates that exhaust the concept of reality.

Illusion as to the logical reality of this order.

But we know that this order, this supposed succession, is illusory and is simply the product of abstract analysis. In the predicate to which verbal prominence is given, there is concentrated or understood every predicate, because in every judgment complete reality[1] is predicated of the subject. Moreover this is shown just by the observation, which reveals the insufficiency of an isolated and abstract predicate, and requires for sufficiency nothing less than the totality of the predicates, the full concept of the Real, of the Spirit or of the Idea. The concept of Reality, of Spirit or the Idea, can without doubt be developed, in its unity and in its distinctions; but (let us yet again repeat) logical Science has for its object, not the effective unity and distinction of the Real, but the *concept* of unity and distinction.

[1] See above Sect. II. Chap. V.

The necessity of the order of the predicates, not founded in Logic in particular, but in the whole of Philosophy.

The ordering of the variety of the predicates, their gradation according to their greater or less adequacy to reality, arises from the fact that disputes as to reality show themselves as one-sided affirmations of this or that predicate or group of predicates, coupled with the neglect or negation of others, which are not less indispensable. When, therefore, we attack such one-sidedness and affirm the complete indivisibility of the predicates, the single predicates, the objects of the one-sided affirmations, are scrutinized one after the other, in order to demonstrate their insufficiency, and for this very reason a certain order is given to them. This order is, without doubt, necessary, because the possibility of errors, or of one-sided thoughts, is a consequence of the distinctions, in which the unity of the Real lives, and which are necessary to it. But for this very reason the order must be sought, not in logical Science, but in the total conception of Reality. For instance, in researches concerning the ethical concept, only he who thinks, not the concept of the concept (logical science), but the concept of ethical activity (ethical science), will be able to determine what one-sided concepts are there possible and what is their order. Only he who thinks

a whole philosophy will be able to determine how many and what and how connected are the one-sided and erroneous modes of philosophy. This cannot be found in the concept of the concept; or rather only those erroneous modes are there found which derive from a one-sided thinking of the concept of the concept. This we shall see in its place. The order of the categories in the sense indicated is certainly not subjective and arbitrary, as a didactic ordering of them would be, a *πρότερον πρὸς ἡμᾶς*; it is a *πρότερον φύσει*. But since this first by nature is identical with the whole concept of Reality, it is not wholly contained in the concept of Logic.

False distinction of philosophy into two spheres, Metaphysic and Philosophy, rational philosophy and real philosophy, etc., due to the confusion between Logic and doctrine of the categories.

If the confusion between Logic and the Doctrine of the Categories, or between the thinking of the logical category and the thinking of the other categories, had produced no other effect than that of introducing into books of Logic a method of treatment that exceeds their bounds, the evil would not be great. It would chiefly affect literary harmony and clarity of didactic exposition. But from that confusion there has originated a genuinely philosophic error—the unfolding of the unity of philosophic science into a duality of grades, which are variously formulated, sometimes as *Metaphysic and Philosophy*,

sometimes as *rational Philosophy and real Philosophy*, sometimes as *Gnoseology and Anthropology* (*or Cosmology*), sometimes as *Logic and System of Philosophy*, and so on. The conception of Reality is thus twice described: once as part of Logic (the Doctrine of the Categories, Ontology, etc.); and again as effective or applied Philosophy. Philosophy is divided into a Prologue to Philosophy and Philosophy, or into Philosophy and a Conclusion to Philosophy. But Philosophy, although it is distinguishable into philosophies (for example, Æsthetic, Logic, Economic and Ethic), *is this distinction itself*, or the unity immanent in it. It never gives rise to a duality of grades. It is never prologue, development and conclusion, being, at its every point, prologue, development and conclusion. As from empirical and formalist Logic arose the idea of a Logic which should not be philosophy, but an organ or instrument or rule or law for the rest of philosophy; so from the confusion of Logic with the Doctrine of the Categories has arisen the idea of a Logic, or Metaphysic, or general Philosophy, or whatever else it may be called, which should be *opposed to or above* the rest of philosophy. But the Science of thought, Logic, is at once thought

and effective philosophy; it is thought itself which in thinking the Real, thinks itself and places itself, as logical Science, in the place which belongs to it in the system of the Real.

Philosophy and pure logic: overcoming of the duality.

It may seem that in this way thought and reality are again divided and a metaphysical dualism created. But the exact opposite is the truth. When Philosophy is distinguished into general and particular, into rational and real, into pure and applied, into Logic-metaphysic and into Philosophy of nature and of man, an irreparable breach is made, which can only be concealed or attenuated in a more or less ingenious manner. But when that doubleness of degree is destroyed (and thought thinking the real thereby thinks itself), and in the construction of Philosophy, the Philosophy of philosophy, namely Logic, is constructed, the dualism is for ever overcome. This thought is the thinking of the distinctions, which the real presents; but to think distinctions and to think unity is, as has been already demonstrated, the same thing.

SECOND PART

PHILOSOPHY, HISTORY AND THE NATURAL AND MATHEMATICAL SCIENCES

I

THE FORMS OF KNOWLEDGE AND THE DIVISIONS OF KNOWLEDGE

Summary of results as to the forms of acquaintance.

THE result of the preceding enquiries into the constitution of the cognitive spirit can be resumed, for mnemonic purposes, by saying that there are *two pure theoretic* forms, *the intuition* and *the concept*, the second of which is subdivided into *judgment of definition and individual judgment*, and that there are two modes of *practical* elaboration of knowledge, or of formation of pseudo-concepts, the *empirical concept and the abstract concept*, from which are derived the two subforms of judgment of *classification* and of judgment of *enumeration*. If the methods in use in the mediæval schools or in those of Port-Royal (which were not without their utility) were still in vogue, we should be able to embody these results in a few *mnemonic verses*, which would render the distinctions we have made easy to impart.

Easy to impart, but not understood, or worse, ill understood; because, as we know, both the scheme of classification here adopted and the arithmetical determination of two or more forms are not truly logical thoughts adequate to the representation of the process of the real and of thought. Our grouping constructed to help the memory must therefore be interpreted with the aid of the developments offered above, and not only corrected, but altogether resolved in them. In these developments, the intuition and the concept have appeared as two forms, not capable of co-ordination, but both distinct and united. The judgment of definition and the individual judgment have appeared as logically identical, divisible only from an external or literary point of view, that is to say, by the greater or less importance attached either to the predicate or to the subject. Further, the formation of the pseudoconcepts is outside theory, although founded upon theoretic elements; it belongs essentially, not to the cognitive spirit, but to the practical spirit. And if their subdivision into empirical and abstract concepts is necessary, the necessity is founded upon the fact, that only in these two modes can the concept be practically developed, when its synthetic unity

is arbitrarily split up into two one-sided forms. Finally, the two fundamental forms of the spirit themselves, the theoretic and the practical, are not co-ordinate with one another, nor capable of arithmetical enumeration. The one is in the other, the one is correlative to the other, because the one presupposes the other.

Non-existence of technical forms, and of composite forms.

No other cognitive or practical-cognitive forms, or other subforms, beyond those which we have defined, are conceivable. The *technical knowledge*, which is discussed in some treatises on Logic, is nothing but knowledge itself, which is always and entirely technical, preceding and conditioning the action and practice of life. The same may be said of *normative* knowledge, by which, as with technical, it is especially meant in ordinary language to designate the whole of the pseudoconcepts. But this is erroneous, when we consider that such knowledge constitutes the true immediate precedent condition of action. The pseudoconcepts must be retranslated into individual judgments, in order that they may be able to form the basis of action, for which, as is justly remarked, we require direct and concrete perceptions of actual situations. Formulæ and abstractions aid perception only in an indirect and subsidiary manner.

The so-called combined or *composite* forms in which two or more original forms are brought together, must also be rejected, for the reason already given, that composite concepts do not exist in pure Logical thought, and consequently cannot exist in the Science of Logic, which is the science of that thought. The composite form, then, is an empirical and arbitrary determination, as may be observed, for instance, in the case in which we speak of an empirico-philosophic concept, that is, of the union (which is a successive enunciation) of an empirical concept and a philosophic concept.

Identity of cognitive forms and forms of knowledge. Objections to it.

The cognitive forms having thus been established, we pass on to the question, what and how many and of what kind are the *forms of knowledge*. The reply must be that the forms of knowledge (for example, History and the natural Sciences) cannot be anything but identical with the cognitive forms, and of the same kind and same number as they. The first of these statements finds itself at once at issue with common thought, in which a profound distinction is drawn between the ordinary and the scientific man, the profane and the philosopher, the poet and the non-poet, the ignorant and the learned, layman and clergy; and again, between conver-

sation and science, effusion of the soul and art, collection of facts and history, good sense and philosophy. It is thought that acquaintance belongs to all: every one communicates his sentiments, narrates his experiences and those of others, reasons, classifies and calculates. But art, philosophy, history and science are believed to belong to the few. That alone deserves those solemn names, which is the result of exceptional moments, when man is more than man, or at least when he is no longer one of the crowd, but belongs to an aristocracy.

Empirical distinctions and their limits.

And, certainly, these distinctions are useful, and therefore necessary in practice. We all feel the need of creating an aristocracy of men and things; of distinguishing the word that a sergeant whispers in the ear of a maid-servant from a sonnet or a symphony; the proverbs of Sancho Panza from a treatise on Ethics; and the report of a police-agent from the history of Rome or of England. We distinguish the classification of the glasses and bowls in use at home from that of Mineralogy or of Zoology; the reckoning of our daily expenses from the calculation of the astronomer; and, finally, Tom, Dick and Harry from Aeschylus, Plato, Thucydides, Hippocrates and Euclid. The *odi profanum vulgus* is a motto

that should be appropriated by whosoever labours to promote the life of thought and of art, yet not without adding to it Ariosto's post-script: "Nor do I wish to absolve any from the name of vulgar, save the prudent."

But, admitting all this, we must recognize not less energetically that these distinctions, imposed by the necessities of life, have in philosophy no value at all, and that their introduction there, if it has some excuse in professional custom, is nevertheless the way to shut off from us for ever all understanding both of the forms of knowledge and of those of acquaintance. Man is complete man at every instant and in every man; the spirit is always whole in every individuation of itself. The philosopher in the highest sense (in the philosopher worthy of the name) could be defined as one who raises doubts, collects difficulties, and formulates problems, intent upon clearing up doubts, upon levelling difficulties, and upon solving problems; the artist as a man who limits himself to looking and to recording the significance of what he has seen. In this case, the ordinary man would be he who encounters no theoretic difficulties and is unaware of spectacles worthy of contemplation. But in reality the ordinary man also sets himself problems

and solves them, contemplates and expresses the spectacle of the real. The distinction has value, therefore, only in descriptive Psychology, which passes in review types of reality and the perfected organs, so to speak, which reality creates for itself in great philosophers and great poets. But what empiricism always divides, philosophy must always unite. To be scandalized when some one speaks of the poetry, philosophy, science, mathematics, which are in every one's mouth; to mock those who unify and identify; to appeal to good sense and to threaten the madhouse, are things that reveal much pedantry but no humanity, or, at most, very little. It is foolish to fear that such an identification as we propose will lessen the importance of the forms of knowledge and render trivial divine Poetry, lofty Philosophy, severe History, serious Science and ingenious Mathematics. As the hero is not outside humanity, but is he in whom the soul of the people is concentrated and made powerful, so poetry, philosophy, science and history, aristocratically circumscribed, are the most conspicuous manifestations attained by the elementary forms of acquaintance themselves. Such they could not be, were they not all one with them, just as the mountains could not be, were it not for the earth

upon which they are raised and of which they are constituted.

It might be said that the forms of knowledge are rich and complex manifestations of the human spirit, if this statement did not open the way to another common prejudice, to the belief that to each of those forms (for instance, to Art, History and Philosophy) several spiritual activities contribute. Were this so, we should have before us a mixture, not a product of an unique and original character, such as we find, as a matter of fact, in a work of Art, a philosophic theory, a narrative, and a theorem. By the law of the unity of the spirit all the forms of the spirit are implicit in one another; and the results, previously obtained from the various forms, condition each one of them. But each one of them is, explicitly, itself and not the others; it absorbs and transforms the results of the others; it does not leave them within itself as extraneous elements, and it therefore makes of them its own results. The strength of each one of those forms of knowledge lies precisely in this *purity*, which persists in the greatest complexity. A great poem is as homogeneous as the shortest lyric or as a verse; a philosophic system as homogeneous as a defini-

tion; the most complicated calculations as the addition of "two and two make four."

Enumeration and determination of the forms of knowing, corresponding to the forms of acquaintance.

If the forms of acquaintance and the forms of knowledge be identical, it is proved thereby that the second are as many and of the same sort as the first; and the existence of combined or composite forms is also excluded from the forms of knowledge. Thus we are henceforth freed from the obligation of enquiring into the particular nature of the various forms of knowledge, a task that we have already fulfilled when enquiring into the forms of acquaintance. It is sufficient to name them (in correspondence) with the names already given to the forms of acquaintance, for thus they will be clearly distinguished and completely enumerated. The method of denomination itself will not be new and surprising, because it has been, as it were, anticipated, and foreseen from the examples of which we have availed ourselves above, and also from some terminological references. We have now only to make it manifest, to declare it, so to speak, in clear tones.

Pure intuition is the theoretic form of Art (or of *Poetry*, if we wish to extend to the whole of æsthetic production the name given to a group of works of art); and art cannot be otherwise

defined than as pure intuition. The thinking of the pure concept, of the concept as itself, of the universal that is truly universal and not mere generality or abstraction, is *Philosophy*, and Philosophy cannot be otherwise defined than as the thinking, or the conceiving of the pure concept. And since the pure concept can be expressed either in the form of definition or in that of individual judgment, there corresponds to this duplication the distinction of the two forms of knowing, *Philosophy in the strict sense, and History*. The method of treatment called *empirical Science or natural Science*, or most commonly in our time, *Science*, is composed of those pseudoconcepts known as representative or empirical or classificatory. The mathematical Sciences are composed of abstract, enumerative and mensurative pseudoconcepts, and the application of the second of these, by means of the first, to individual judgments, is nothing else than what is called the *mathematical Science of nature*.

Critique of the idea of a special Logic as doctrine of the forms of knowledge,

It is usual for the treatment of the forms of knowledge to be presented in the majority of treatises as a *special* or *applied Logic*; following *general* or *pure Logic*, which has for its object the specific forms of acquaintance alone, or as

it is significantly expressed, the *elementary* forms of acquaintance. But we cannot admit the existence of such a Logic, for the reasons already given. The elementary or fundamental forms are the only forms philosophically conceivable and really existing, and the whole of logical Science is exhausted in them. There is no duality of grades for logical Science any more than for Philosophy in general. And as no special Æsthetic exists independent of general Æsthetic, no special Ethic and Economic independent of general Economic, so there is not a *general* Logic alongside of a *special* Logic.

and as doctrine of methods.

Special Logic is also inadmissible, when it is presented as doctrine of *methods*, and especially of demonstrative or intrinsic methods. The method of a form of knowledge and in general of a form of the spirit, is not something different or even distinguishable from this form itself. The method of poetry is poetry, the method of philosophy is philosophy, the method of mathematics is mathematics, and so on. Only by means of empirical abstraction is the method separated from the activity itself; and when this duality has been created, we are led to add to it a third term, which is called the *object* of that form. But since the method is the form itself,

so form and method are the object itself. Certainly, all the forms of the spirit have a common object, which is Reality; but this is not because reality is separated from them, but because they are reality: they therefore *have* not, but *are* this object. Thus the forms of knowledge have not a theoretic object, but create it: they themselves are that object. Philosophy has the pure concept for method and object; art has intuition; science the empirical concept, and so on. If we wished to treat of methods in a special Logic, we could not do otherwise than repeat what we have already said in respect to the character of each form.

Nature of our treatise in respect to the forms of knowledge.

All this amounts to saying that the things we shall discuss concerning the various forms of knowledge are not to be understood as a special Logic, although they are grouped in a second part for literary reasons. There we shall examine one by one the various forms of knowledge, in order to confirm their identity with the forms of awareness and to demonstrate how the characters adopted by them are reducible to those already explained for the others, and how the difficulties found in them are overcome by means of the same principles that we employed to overcome the difficulties presented by the

others. In so doing, we shall also gain the advantage of making more clear the doctrines already laid down as to the elementary forms, by fixing our attention upon those manifestations of them which are presented on a larger scale. To those who forget or deny the existence of the pure concept or of the abstract concept, it will be of assistance, in giving the speculative deduction of those forms, to point out the masterpieces of Art, of Philosophy, or of Mathematics, and to invite an examination of their structure. It is true that in our day preference is given to another method, which is not only antiphilosophical but also antipædagogic. This method consists in altogether neglecting philosophic demonstration in the attempt to divert the attention from notable and luminous manifestations of the spirit, in order to devote it to rude and uncertain manifestations. Inscriptions of savages are preferred to the art of Michael Angelo, the philosophy that is still crudely enveloped in religion and custom to that of civilized times, something whose nature none can tell precisely, owing to lack of documents and the elements of research, to what is evidently art and philosophy. Such enquirers adopt precisely an opposite course to that followed by the sciences of observation, which have made

telescopes and microscopes to enlarge the little and bring the distant near. They seek for instruments which shall diminish the great and make the near remote. Theirs is a strange empirical caricature of philosophy, which substitutes the chronologically remote for the fundamentally conceptual, and for the logically simple, the materially small, which is not, on that account, simple and is far less transparent. For our part (and we say it in passing), we believe that to furnish examples of where to fix the attention in logical enquiry, the minds of an Aristotle or of a Kant afford all we require, without there being any necessity to have recourse to the psychology of sucklings and idiots. But to study Aristotle and Kant does not suffice for knowledge of the truth of the concept. We must find in all beings of whatever grade and importance, the universal Spirit and its eternal forms.

And since we have studied the first and most ingenuous form of knowledge, Art, in a special volume, we shall here begin our examination of the second of its forms, Philosophy; and first of all, of Philosophy *in the strict sense.*

II

PHILOSOPHY

Philosophy as pure concept and the various definitions of philosophy. Those which deny philosophy.

ALL the definitions that have ever been given of philosophy will be found to contain the thought that philosophy is the pure concept (or to say the same thing with more words and less precision), that it has the pure concept as its directive criterion. All, be it well understood, save those which, in negating the pure concept, negate also the peculiar nature of philosophy. But such are not, properly speaking, definitions of philosophy, although even these, by contradicting themselves, imply and assume the definition of philosophy as an original form, and so as the pure concept. Such is the case with the theories already examined, of æstheticism, mysticism, and empiricism (and also of mathematicism), to which we shall return. For them, philosophy is art, sentiment, the empirical (or abstract) concept. But it is an art in some way differentiated from the rest of art, a sentiment that acquires a

peculiar value, an empirical or abstract concept, which raises itself up and looks over the heads of the others. Thus it is something peculiar, a mode of reflecting *sui generis*, and so precisely the pure concept. Empiricism especially reveals this intimate contradiction, when it advocates a philosophy consisting of a systematization or synthesis of the results of the empirical sciences. That is to say, it advocates something not given by the empirical sciences, because, were they to give it, they would already be systematized and synthesized of themselves, and the further elaboration asked for would be altogether superfluous.

Those that define it as the science of supreme principles, ultimate causes, etc.; contemplation of death, etc.;

All the other definitions which presuppose the peculiarity of philosophy are reducible, as is easily seen, to the single character of the pure concept. Philosophy (they say) is the science of the *supreme principles of the real*, the science of *ultimate causes*, of the *origin of things*, and the like. In these propositions, the supreme principles are evidently not real things, or groups of real things, or empty formulæ, but the ideal generators of the real. Ultimate causes are not causes (for the cause is never ultimate, being always the effect of an antecedent cause), but ideal principles. The origin in question is not the historical origin of this or that single fact, but

the ideal deduction of the fact from facts or from omnipresent reality. The same idea is expressed in the imaginative saying that philosophy is the *contemplation of death.* For what but the individual dies? And is not the contemplation of the death of the individual also that of the immortality of the universal? Is it not contemplation of the eternal? This remark supplies the motive for that other formula which defines philosophy as "the vision of things *sub specie aeterni.*"

as elaboration of the concepts, criticism, science of norms;

The character of the pure concept is also indicated in the definition of philosophy as the *elaboration of the concepts,* which the other sciences leave imperfect and self-contradictory. Indeed, since no human activity has the imperfect and contradictory as its aim, if the other sciences are involved in imperfect and contradictory concepts, this means that they do not aim at constructing concepts and that philosophy alone elaborates true and proper concepts. For this reason, philosophy has sometimes been conceived, not as science, but as criticism, and criticism means placing oneself above the object criticized, in virtue of a concept superior to those criticized. For this reason, finally, philosophy has been conceived as the science of *norms and values*:

norms and values, which, if they are to surpass singular things, cannot be extraneous to them. Hence it is the same thing to speak of *norms and values*, or of universal concepts, surpassing and containing in themselves each single thing.

as doctrine of the categories.

If philosophy is the pure concept, it is also the distinctions of the pure concept; it is all the pure concepts capable of serving as predicates to individual judgments and so of acting as categories. Here there is another definition of philosophy: philosophy is the *doctrine of the categories*. For this reason we have already refused to assign to Logic the search for the categories: first because the doctrine of the categories is the whole of Philosophy, whereas Logic is only one of its links, and consequently seeks only one of the categories, that of logicity. It could also be said that Philosophy is the doctrine of the categories, and that Logic, as a part of Philosophy, is a Category of categories, or a Philosophy of Philosophy. Hence its singular position among philosophical sciences, so that it appears at the same time within and without Philosophy, because it completes by surpassing and surpasses by completing it. In reality, Logic, like every other philosophic science, is within and not without Philosophy; like the

glassy water which reflects the landscape and is itself part of the landscape.

Exclusion of mathematical definitions of philosophy.

These definitions which we have selected to record and to interpret (and others which we leave to the reader to record and to interpret) are all *formal*, in the legitimate sense of the word. They define the eternal nature of philosophy, they do not determine actually any special solution of other philosophical problems, although naturally they do potentially determine one solution, in that they can agree only with one solution. Obedient to this formal character, we have not taken and shall not take account of definitions that imply the effective solution of all philosophical problems, or of Philosophy in its totality. Such is, for instance, the definition that Philosophy is knowledge of oneself, as was said at the dawn of Hellenic thought; or, that it is the return to the inward man where dwells the truth, as St. Augustine said; or that it is the science of Spirit, as we say. This definition offers something more than the simply logical aspect of Philosophy. Looked at from the purely logical standpoint, Philosophy will be the science of God or of the Devil, of Spirit or Matter, of final cause or mechanism, or of anything else that may be suggested as a hypo-

thesis for enquiry, provided that this, whatever it be, is thinkable as a *pure concept or Idea.* Whoever should negate this condition, would not negate this or that philosophy, but as we have seen, philosophy itself, in favour of art, of action, or of something else.

Idealism of every philosophy.

But if Philosophy is by its logical nature pure concept or idea, every philosophy, to whatever results it may attain, and whatever may be its errors, is in its essential character and deepest tendency, *idealism.* This has been recognized by philosophers of the most different and antagonistic views (for example, by Hegel and by Herbart). It should be taught as truth to those who are ignorant of it and those who have forgotten should be reminded of it. Determinism negates the end and affirms the cause; but the cause which it posits as its principle, is not this or that cause, but the *idea* of cause. Materialism negates thought and affirms matter; but not this or that matter, which composes this or that body, but the *idea* of matter. Naturalism denies spirit and affirms nature; not this or that manifestation of nature, but nature as *idea.* Finally, when a single natural fact seems to be posited as the principle of explanation of reality, this fact is idealized and stands as the idea of itself, gener-

ating itself and everything else. Thus (it has been repeatedly remarked) the water of Thales, by the very fact that it is taken as a principle, is no longer any given empirical water, but metaphysical and ideal water. In like manner, the *numbers* of Pythagoras are not those of the Pythagorean table, but cosmic principles and ideas. Theism does not believe it possible to obtain the sufficient reason of reality, without positing a personal God, above and beyond the world. But this God is always something non-representative, however much he may be involved in sensible representation, and placed upon Sinai or Olympus. He is the idea of personal divinity, the idea of Jehovah or of Jove. The philosophy which is called idealist in the strict sense of the word (it would be better called activist or finalist or absolute spiritualism), strives to prove that, for instance, cause, matter, nature, number, water, Jehovah, Jove and the like, are not thinkable as pure concepts and as such imply contradictions, and that therefore such philosophies are insufficient. This means that it holds the *idealism* of those philosophies *insufficient*, that they are not equal to themselves and are inadequate to the assumption on which they rest; but it does not imply that this assumption is not idealistic.

Were it not idealistic, it would not be philosophical, and so it would not be possible to submit it to criticism from the philosophical point of view.

Systematic character of philosophy.

From the identity of philosophy with the pure concept can be also deduced its necessarily *systematic* character.

To think any pure concept means to think it in its relation of unity and distinction with all the others. Thus, in reality, what is thought is never *a* concept, but *the* concept, the *system* of concepts. On the other hand, to think the concept in general is only possible by arbitrary abstraction. To think it truly in general, means to think it also as particular and singular, and so to think the whole system of distinct concepts. Those who wish to think an isolated concept philosophically without paying attention to the others, are like doctors who wish to cure an organ without paying attention to the organism. Such a mode of treatment may cure the organ, but the organism dies and with it dies the healed organ a moment after. The true philosopher, when he makes even the smallest modification in a concept, has his eye on the whole system, for he knows that this modification, however small it may seem, modifies to some extent the whole.

Philosophic and literary significance of system.

The systematic character of philosophy, understood logically, belongs to every single philosophical proposition which is always a philosophical cosmos, as every drop of water is the ocean, indeed, the whole world, contracted into that drop of water. It is hardly necessary to distinguish from this the *literary sense* of system, which is the name given to certain forms of exposition, which embrace definite groups of problems, traditionally held to be those in which philosophy is contained. When some or many of those groups do not receive explicit literary treatment, it is said that system is wanting. It is true that there is wanting the fulfilment of a literary task (or what here amounts to the same thing, of a pedagogic task); but the system is there, even in the case when a very specialized problem is treated, provided it be approached with philosophic and so with systematic energy. That the same thinker, when he passes to another problem, should give a wrong solution contradictory to that previously given, does not prove that he had not at first a system, but that he has lost it when faced with the new difficulty. He was at first a philosopher and so systematic; afterwards, not philosopher enough, and so not sufficiently systematic.

Advantages and disadvantages of the literary form of system.

The traditional groupings of problems, and the construction of system in the literary and pedagogic sense, certainly have their utility (all that exists has its proper function and value). They preserve and promote culture already acquired, by obliging it to examine difficulties, which, were they neglected, might unexpectedly become a great hindrance and loss. Hence the love for system, or for the literary form of system, a love which the author of these pages also nourishes in his soul and of which he has sought to give some proof, by writing a *system*, although it is long since systems have been written, in Italy at least (unless scholastic manuals be thus called), and it is no slight merit to have braved the ridicule of the enterprise. But systems have also the disadvantage of sometimes leading to a tiresome re-exposition of problems that are out of date and whose solutions have passed into the common patrimony of culture. The treatment of these problems is better left to be understood, that time and space may be gained for the treatment of others more urgent. Hence the rebellion against system, or against the pedantry which can adhere to that form of exposition. This rebellion is similar at all points with that against the pedantry of definition, which is a

legitimate rebellion, yet cannot eliminate the logical form of definition. Instead of systems, we write monographs, essays, and aphorisms, but these, if philosophic, will always be inwardly systematic.

Genesis of the systematic prejudice and rebellion against it.

But the rebellion against systems has another more serious cause, less literary and more philosophical. Sometimes the demand for a system becomes a *systematic prejudice*. This fact merits explanation, because thus stated it may reasonably appear to be paradoxical. However could the demand inherent in a function be changed into a prejudice, or into an obstacle to that function? Stated in these terms, it certainly seems inconceivable. But it becomes clear and admissible, when we remember that philosophical enquiry is both induction and deduction, the thinking of distinction and the thinking of unity in distinction. Neither of the two processes, which are one single thing, should be substituted for or dominate the other. If we think the concept of morality, it should be placed in relation to and deduced from the other forms of the spirit and thus from unity; but it must also be thought in itself. The thinking of the peculiar nature of the moral act cannot remain isolated and atomic, but unity in its turn cannot give the

character of the moral act, unless this act be present to the spirit and make itself known for what it is. In the process of research, it is possible to deduce the moral act from the consideration of the other activities of the spirit, without thinking it in itself. But here a *heuristic* process is adopted, a *hypothesis* is made, and this hypothesis must afterwards be verified, in order to become effective thought and concept. Now the systematic prejudice consists precisely in thinking the unity without thinking the distinctions, in deduction without induction, in changing the hypothesis into a concept without having seriously verified it. Hence analogical constructions (or falsely analogical, and so metaphysical and fantastic), which take the place of philosophical distinctions, and hence the systematic prejudice, which is a *false idea of system.* Against this rebellion is justified. But the mistake is usually made of discarding the true demand for system through horror of the false, or of denying the utility of the analogical process, which is blameable in the system, but useful in enquiry.

Sacred and philosophical numbers; meaning of the demand which they express.

Another aspect of this same rebellion which has become universal in most recent times, is the distrust of or open hostility towards the search for *symmetry*, the arrangement of philosophic con-

cepts in *dyads*, *triads*, *quatriads*, or in other such-like numbers, which precisely express symmetry in the ordering of those concepts. And such distrust will be judged reasonable by any one who recalls the excesses caused by this love of symmetry and the puerilities to which some even of the loftiest philosophers abandoned themselves, owing to their excessive attachment to certain numbers. The pedantry of the Kantian quatriads and triads is truly insupportable, nor are Hegel's triads less artificial. These were very often reduced by his disciples to conjuring tricks and almost to buffoonery. It was natural that there should be a reaction towards the search for the asymmetrical and towards the doctrine that the concepts attained cannot be arranged in a beautiful order, for they change their order from one sphere to another, but that nevertheless they and no others are the concepts of reality—inelegant but honest; asymmetrical but true. The reaction is comprehensible, the distrust justifiable; but the hostility is certainly unjustifiable. If distinct concepts constitute a unity, they must of necessity constitute an order or symmetry, of which certain numbers, that can be called regular, are the expression or symbol. The concepts of an empirical science may be thirty-seven, eighty-

three, a hundred and thirteen, or as many as you like according as they are arranged. But the concepts of philosophy will always be dyads, triads, quatriads and the like, that is to say, an organic unity of distinctions and a correspondence of parts. For this reason, the human race has always had *sacred numbers* in religion and *philosophic numbers* in philosophy. Let him laugh who wills; but we do not say that he laughs well. The criterion of symmetry must not become a *prejudice*. It must, however, act as a control upon the enquiry that has been accomplished, since it greatly aids, as a heuristic process, the enquiry that is yet to be made. Astronomers are praised, when, thanks to their calculations, supported by the criterion of proportion and symmetry, they form a hypothesis that a star, unseen at the time, but which the telescope eventually discovers, must be at a certain place in the sky. Why should not a philosopher be equally praised, who deduces that for reasons of symmetry, there must be in the spirit a form, as yet unobserved, or that for the same reasons, there should be eliminated a form which does not seem to be eliminable, but which spoils the symmetry? Why should the spirit be less rhythmical and less symmetrical than the starry sky?

Impossibility of dividing philosophy into general and particular.

When the systematic character of philosophy is conceived in this way, it is seen that the system is not something superadded, like a thread used for binding together the various parts of philosophy and quite external to the objects that it unites, so that we can consider separately the objects and the thread, the parts and the system. In philosophy, none of the parts are without the whole, and the whole does not exist without the parts. Translated into other terms, this means that there are not *particular* philosophic sciences, just as there is not a *general* philosophy. We have made use of this proposition, in order to confute the usual conception of Logic as a prologue to philosophy, and to show how this error (which in the case of Logic is supported by special reasons) is the principal source of other like errors. Thus Metaphysic or Ontology, or some other science, which is supposed to give the unity of the real, of which the special philosophic sciences give only the distinctions, is placed before or after the special philosophic sciences like a prologue or an epilogue. The truth is that general philosophy is nothing but the special philosophic sciences, and *vice versa*. The plural and the singular cannot be separated in the pure concept, where the plural is plural of the

singular, and the singular is singular of the plural.

Evils of the conception of a general philosophy, separated from particular philosophies.

The destruction of this erroneous idea of a general philosophy has direct practical importance. For, once the so-called science has been constituted, by means of a group of arbitrarily isolated problems, which really belong to the various sciences called particular, we are led to believe that true philosophy consists of a medley, in constant agitation and shock, and that, thanks to this agitation and these shocks, it becomes ever more worthy of itself, that is, of being a medley. But the problems of God and of the world, of spirit and of matter, of thought and of nature, of subject and of object, of the individual and of the universal, of life and death, torn from Logic, from Æsthetic, from the Philosophy of the practical, become insoluble or are solved only in appearance (that is to say, verbally and imaginatively). Many young men, ignorant of all particular philosophical knowledge, attack them as if they were the first step in philosophy, and many old professors find themselves at the end of their lives in the same state of mental confusion as at the beginning, indeed with their confusion increased and henceforth inextricable, owing to the false path that they have followed

for so many years. They have not respected philosophy, in their first relations with it; they resemble those men who will never really love a woman, because they failed of respect to women in their youth. On the other hand, the so-called particular philosophical sciences, deprived of some of their organs and become blind or deaf or otherwise maimed, fall into the power of psychologism and empiricism. Hence the empirical and psychological treatment of Morality, of Æsthetic, and of Logic itself. In regard to this evil, now more than ever rampant in philosophic studies, it is necessary to remember, that the history of philosophy teaches that no philosophic progress has ever been achieved by so-called general philosophy, but always by discoveries made in one or other of the so-called special philosophies. The concept of Socrates and the dialectic of Hegel are discoveries in Logic. Kant's concept of freedom is a discovery in Ethics. The concept of intuition is a discovery in Æsthetic. The critique of formalist logic is a discovery in the Philosophy of language. The old idea of God has been dissolved by those most modest, yet greatest of men, who contented themselves with formulating a new proposition on the syllogism or on the will, on art or history,

or with defining the abstract intellect or with fixing the limits of the fancy. Had we been obliged to await these solutions from the cultivators of that anæmic general philosophy, the old idea of God would now be more rife than before. And in truth it is still rife among those philosophers of whom we have spoken, for it reappears from the midst of the medley which they stir, either with the name of the Unknowable, or with the old name that still is reverenced.

III

HISTORY

SINCE all the characteristics assigned to Philosophy are verbal variants of its unique character, which is the pure concept, so all the characteristics of History can be reduced to the definition and identification of History with the individual judgment. *History as individual judgment.*

History, being the individual judgment, is the synthesis of subject and predicate, of representation and concept. The intuitive and the logical elements are both indispensable to it and both are bound together with an unseverable link.

Owing to the necessity for the subject or intuitive element, history cannot be constructed by pure reason. The vision of the thing done is necessary and is the sole *source* of history. In treatises upon historical method the sources are usually divided into *remains* and *narratives*, meaning by remains (*Ueberreste*) the things *The individual element and historical sources; relics and narratives.*

which remain as traces of an event (for example, a contract, a letter, a triumphal arch), and by narratives the accounts of the event as they have been communicated by those who were more or less eye-witnesses, or by those who have consulted the notes of eye-witnesses. But, in truth, narratives are valuable just in so far as it is presumed that they place us in direct contact with the thing that happened and make us live it again, drawing it forth from the obscure depth of the memories that the human race bears with it. Had they not this virtue, they would be altogether useless, as are the narratives to which for one reason or another credence is refused. A hundred or a thousand narratives lacking authenticity are not equal to the poorest authentic document. An authentic narrative is both a document and remains; it is the reality of the fact as it was *lived* and as it vibrates in the spirit of him who took part in it. The search for veracity and the criticism of the value of sources are reducible in the ultimate analysis, to the isolation of this genuine resonance of fact, by its liberation from perturbing elements, such as the illusions, the false judgments, the preoccupations and passions of the witness. Only in so far as this can be successfully done, and in the

measure in which it is successful, do we have the first condition of history as act of cognition—that something can be *intuited* and thereby transformable into the *subject* of the individual judgment, that is to say, into historical narrative.

The intuitive faculty in historical research.

On this necessity is based the importance which in the examination of historians is attached to intuition, or touch, or scent, or whatever else it may be called, that is to say, to the capacity (derived in part from natural disposition and in part from practical exercise) of directly intuiting what has occurred, of passing beyond the obstacles of time and space and the alterations produced by chance or human passion. An historian without intuitive faculty, or more exactly (since no one is altogether without it), with but slender intuitive faculty, is condemned to barrenness, however learned and ingenious he may be in argument. He finds himself inferior to others, less learned and less logical than he, inferior even to the uncultured and to the illogical, when it is a question of feeling what lies beneath words and signs, or of reproducing in himself what actually happened. For the same reason, it sometimes happens that an expert in a given trade is astonished to hear the learned arm-chair historian describe certain orders of facts, of which

he has no experience and of which he talks as a blind man talks of colours. A sergeant can intuite a march better than a Thiers, and laugh at the millions of men that Xerxes had led into Greece by simply enquiring how they were fed. A political schemer understands a court or ministerial intrigue far better than an honest man like Muratori. A craftsman can reconstruct the successive brush-strokes and the traces of change of mind in a picture better than the erudite and æsthetic historian of art. Historical works perhaps defective or even failures from other points of view, sometimes fascinate by the proof they give of freshness of impression: and this quality may serve to increase our knowledge of facts and to rectify the errors into which their authors have fallen in other respects. To a historian of the French Revolution we can pardon even the mistaking of one personage for another, of a river for a mountain, or the confusion of months and years, when on the whole he has lived again better than others the soul of the Jacobins, the spiritual conditions of the mob of Paris, the attitude of the peasants of Burgundy or of La Vendée. What is called an historical novel sometimes has in certain respects greater value than a history, if the novel is

inspired by the spirit of the time and the history contains merely an inventory.

The intuitive faculty in historical exposition. Similarity of history and art.

The intuitive faculty, indispensable in research, is not less indispensable in historical exposition; since it is necessary to intuite the actual fact, not in a fugitive and sketchy manner, but so firmly as to be able to express it and to fix it in words, in such a way as to transmit its genuine life to others. Hence the specially artistic character that must be possessed by true historians. Here they resemble pure artists, painting pictures, as they do, composing poems and writing tragic dialogues. Certainly, every thought, even that of the most abstruse philosopher and mathematician, becomes concrete in artistic form. But the historian (in the somewhat empirical sense of the word) approximates much more nearly to those who express pure intuitions, since he gives literary preference to the subject over the predicate. This has been generally recognized both by historians, who have freely presented themselves as bards of their race invoking the Muse who represents History upon Parnassus, while there is there no representative of Philosophy, Mathematics, or Science; and by theorists, who have constantly debated the question as to *whether history is art.* It seems indeed to be

art, when the predicate or logical element is so well concealed that hardly any attention is paid to it.

Difference between history and art. The predicate or logical element in history.

I say *hardly*; because if no attention whatever be paid to it, if literary emphasis become logical mutilation, art will remain, but history will have gone. A book of history will no longer merely *resemble* a poem or romance, but will *be* a poem or a romance. What is it that, from the point of view of intuition, distinguishes an imaginative vision and an historical narrative? If we open the *Divine Comedy* or the *Rime* of Petrarch and read: "In the middle pathway of our life, I found myself in a dark forest . . .," or, "I raised my thought to where she whom I seek was and find not upon earth . . ."; and if we open Livy's *History*, at the place where he recounts the battle of Cannae, and read: "*Consules satis exploratis itineribus sequentes Poenum, ut ventum ad Cannas est, ubi in conspectu Poenum habebant, bina castra communiunt*," nothing at first seems changed; both are narratives. Yet everything is changed. If we read Livy as we read Dante or Petrarch, the battle of Cannae in the same way as the voyage of Dante to the Inferno, or the passage of the spirit of Petrarch to the third heaven, Livy is no longer Livy, but a story

book. In like manner, if we read a book of stories, as, for example, the *Kings of France* or the *Guerin Meschino*, in the same way as they are read by the uneducated man of the people, who seeks history in them, the story book becomes transformed into a historical book, although of a kind that must be criticized and refuted when a higher degree of culture has been attained. This suffices to show the importance of that predicate, which is sometimes left to be understood in the words, but whose effective presence transforms the pure intuition into the individual judgment and makes *history* of a *poem*.

Vain attempts to eliminate it.

The necessity of the logical element has been several times denied, and it has been affirmed that the historian must let things speak for themselves and put into them nothing of his own. This fine phrase may have some reference to a certain truth, as we shall see. But if it is understood as the exclusion of the logical element in favour of pure intuition (and worse still, if it intends to exclude also the category of intuition, for in that case we have simple *muteness*), it proclaims the death of history. Without the logical element it is not possible to say that even the smallest, the most ordinary fact, belonging

to our individual and everyday life, has *occurred*; as, for instance, that I rose this morning at eight o'clock and took luncheon at twelve. For (to give no other reasons) these historical propositions imply the concept of existence or actuality and the correlative concept of non-existence or possibility, since in affirming them I also deny that I only dreamed of rising at eight or of taking luncheon at twelve. All will agree that we cannot speak of a historical fact if we do not know that it is a fact, that is to say, something that has happened; even stories become the object of history, in so far as their existence as stories is attributed to them. A story, told without knowing or deciding whether it be or be not a story, is poetry; perceived and told as a story, it is mythography, that is to say, history; the author of the *Iliad* or the author of the *Niebelungen* is not Adalbert Kuhn, Jacob Grimm or Max Müller.

Extension of historical predicates beyond that of mere existence.

But the criterion of existentiality does not itself suffice, as some believe, for the effectual constitution of historical narrative. For what sort of narrative should we have, if we merely said that something had happened, without saying *what* had happened? That something has happened and does happen at every instant,

is not, as we know, the content of historical narrative, because it is the affirmation that being is, or that becoming is. What has been said of the individual judgment, namely, that it is constituted by all the predicates together, that is, of the whole concept, and not by the predicate of existence alone, torn from the others, must also be said of historical narrative. It is truly complete and therefore realized, when the intuition, which supplied it with the rough material, is completely penetrated by the concept, in its universality, particularity and singularity. That the consuls, after having sufficiently explored the routes, followed the Carthaginian, entered Cannae, and seeing themselves face to face with the army of Hannibal, pitched and fortified their camp (as runs Livy's narrative), implies a crowd of concepts, equal in number to the historical affirmations collected in that sentence. No one ignorant as to what is man, war, army, pursuit, route, camp, fortification, dream, reality, love, hatred, fatherland, and so on, is capable of *thinking* such a sentence as this. And the obscurity of one of those concepts is sufficient to make it impossible to form the narrative as a whole, just as any one who does not understand the meaning of the word *castra*

is not in a position to understand what forms the argument of Livy's narrative. If the sources are changed, the historical narrative changes; but this latter changes no less, if our convictions as to the concepts are changed. The same matter is differently arranged and gives rise to different histories, if it is narrated by a savage or a cultured European, by an anarchist or a conservative, by a protestant or a catholic, by the me of this moment or the same me of ten years hence. Given that all have the same documents before them, each one reads in them a different happening.

Alleged insuperable variation in judging and presenting historical facts, and consequent claim for a history without judgments.

But the fact here stated seems to lead straight to despair as to the fate of history, or at least as to its fate, so long as it is bound to the logical element, to convictions about the concepts. When it is observed that the same facts are narrated in the most different way; that what for some is the work of God is for others the work of the Devil; that what for some is the manifestation of spiritual forces is for others the product of material movements of the brain, according as it is well or ill-nourished; that to some the good of life lies in every explosion and revolt, while to others it lies only in regular work under the tutelage of laws rigorously observed and made

to be observed,—we arrive at the conclusion of historical scepticism, namely, that history as usually narrated is nothing but a story woven from the passions of men. The one salvation from such a state of degeneration seems to be a return to the pure and simple reproduction of the document, or at least to the pure intuition, which introduces no element of *judgment*, or of what is called *subjective*. But this salvation is only a figure of speech, for pure intuition is poetry and not history, and to return to it is equivalent to abolishing history. This, however, is clearly impossible, for the human race has always narrated its doings, and none of us can dispense with establishing at every instant how things have happened, what has really happened, and in what actual or historical conditions he finds himself.

Restriction of variations and exclusion of apparent variations.

Historical scepticism is, however, as inexact and one-sided in the observation of fact as it is puerile in the suggestion of a remedy. Certainly, there are divergences between the various accounts of the same fact; but (setting aside *apparent* divergences, derived from the different interest taken in a given fact, owing to which verbal prominence is given to one or to another aspect of it, and limiting ourselves here to *real* differences) we must, for the sake of exactitude,

take account of all the no less real agreements, to be found side by side with these divergences. In virtue of them, for instance, Protestant and Catholic are unanimous in recognizing that Luther and Leo X. existed, that the one produced a definite movement in Germany and that the other had recourse to certain definite prohibitions; and, finally, both Protestant and Catholic recognize (now at least) the corruption of the ecclesiastical orders at the beginning of the sixteenth century, and the mundane and political interests of the German princes in the wars of religion. In like manner no one, however revolutionary or conservative he is, will question the bad condition of French finances at the eve of the Revolution; or that Louis XVI. convoked the States General; or that he attempted flight and was stopped at Varennes; or that he was guillotined on the 21st of January 1793; or that the French Revolution was an event which profoundly changed the social and moral life of the whole of Europe. Owing to this substantial agreement between two historians in very many points, and indeed in the greater part of the narrative, it happens that we can often read and advise others to read histories that are tainted with the passions of the partisan, while merely recommending the reader to make

a mental allowance for these passions. In like manner, we can usefully employ a defective instrument of measurement, provided we include in the calculation the coefficient of aberration.

The overcoming of variations by means of deepening the

As to the remedy, it is clear that if the divergences as to the concepts arise from ignorance, prejudice, negligence, illegitimate private or national interests, and from other disturbing passions, that is to say, from *insufficient conceiving of the concepts*, or from inexact thought, the remedy is certainly not to be sought in the abandonment of concepts and of thought, but in correcting the former and making perfect the latter. Abandonment would not only be cowardly, but impossible. Having left the Eden of pure intuition and entered the field of history, it is not given us to retrace our steps. There is no returning to blessed and ingenuous ignorance; innocence is lost for ever, and we must no longer aspire to it, but to virtue, which is neither innocent nor ingenuous. Why does what seems good to the Protestant seem bad to the Catholic? Evidently, owing to the different conception that each forms as to this world and the world above us, death and life, reason and revelation, criticism and authority, and so on. It is necessary, then, to open the discussion with the enquiry as to

whether the truth is with the Protestants or with the Catholics, or whether it be not found rather in a third view, which goes beyond both. Once a definite result has been obtained, perplexity will be at an end (at least for him who has attained it), and the narrative can be constructed with as much security as the available historical sources permit. The way indicated will seem hard; but it is the only way. Whoever decides to retain his own opinions, received without criticism, will perhaps provide for his own convenience, but he will renounce history and truth. For the rest, we do not here draw up a programme for the future, but simply establish what history is in its true nature, and consequently how it is manifested and has *always* been manifested. Men in every age have discussed the concepts with which historical reality has been interpreted and have agreed upon very many points, as to which there is no longer any discussion. Both Catholics and Protestants, Revolutionaries and conservatives are, as has been already remarked, more in agreement than they were formerly; because something has passed and penetrated from each to each, or rather the *humanity*, which is in both, has become elevated. Scepticism accomplishes an easy task, but uses an illusory argument, in history as in

philosophy, when it catalogues the points of disagreement. These are before the eyes of all, just because they represent the problems which it is important to solve. Would it not be worth while to keep in view as of equal importance the points already solved, and to say, for example, that historians are henceforth agreed that Anchises did not sleep with Aphrodíte, that the wolf did not suckle Romulus and Remus, and that William Tell did not establish the liberty of the Swiss Cantons? In short, it would not be easy to find either those who support or those who deny Mary's immaculate conception. The Catholic writers who insist upon such disputes are rare, and those who deny are found only in little democratic journals of the inferior sort or of degraded taste.

Subjectivity and objectivity in history: their meaning.

To drive *subjectivity* out of history, in order to obtain *objectivity*, cannot therefore mean to drive away thought to obtain intuition, or worse still, to obtain brute matter, which is altogether inexpressible; but to drive away false thought, or passion that usurps the place of truth, and to mount to true thought, rigorous and complete. If we attain to intuition, instead of saving ourselves from passion we shall burn in its flames. For intuition says nothing but what we as

individuals experience, suffer, and desire. It is just intuition which, when unduly introduced into history, becomes subjectivity *sensu deteriori*; whereas thought is *true subjectivity*, that of the universal, which is at the same time *true objectivity*.

Historical judgments of value, and normal or neutral values. Critique.

We have thus also solved the question (so much discussed in our day) as to the *criterion of value* in history, and whether judgments of values, as well as judgments of fact belong to the province of the historian. It is solved, because true judgments of fact, individual judgments, are precisely judgments of value, or determinations of the proper quality, and therefore of the meaning and value of the fact. We admit no other criterion of value than the concept itself. For this reason, we must also reject the distinction of the *history* of fact and the *criticism* (or valuation) of it. Every history is also criticism, and every criticism is also history; to say that a thing is the fact which we call the *Divine Comedy* is to say what its value is, and so to criticize it. To think *normal* or *neutral* values, as to which (according to the most modern historical theories) men of different points of view should agree, seems at the most a mere *symbol* of that agreement which men are con-

stantly seeking and realizing in the subjectivity-objectivity of thought. This will never be a *fact* completely agreed upon, because it is a perpetual *fieri*. It cannot be expected of the future, because it will belong to the future, as it belongs and has belonged to the present and to the past.

Various legitimate meanings of the protests against historical subjectivity.

If the protest against the intrusion of subjectivity into history cannot logically be said to have any legitimate meaning save that of a polemic against false subjectivity in favour of true subjectivity, it may also imply, on the literary side, a question of expediency, namely, that in the historical work of art greater importance should be given to the representation of facts than to the theoretical discussion of concepts. A historical should not be transformed into a philosophical work. But this is a question that must be studied case by case; for what harm could it do, if a historian, beginning by writing a history, were to end by writing a philosophic treatise? Certainly, it would not be a greater evil than if a philosopher, becoming passionate about the facts he gives as instances, were gradually to abandon his first plan and produce a history in place of a system. At bottom it would do no harm, or very little, provided that such philosophy or such historical

representation were good; and this is precisely what must be examined case by case. A more appropriate meaning of the polemic against the subjectivity of history is the recommendation that in narrating history, *emphatic*, *negative*, and *desiderative* forms should accompany logical judgments which, as such, are judgments of value, as little as possible. These forms, it is argued, are justifiable in relation to the present or immediate past, because they indicate the direction of the future, but in relation to the remote past they are usually empty and superfluous. Indeed, to rage against Marius or Sulla, Cæsar or Pompey, Frederick Barbarossa or the burgesses of Lombardy, is somewhat vain, because those historical personages have, in general, no near or practical interest. But, on the other hand, it is also true that these characters always have some near and practical interest, and in that measure we cannot prevent history, even of the remote past, being here and there revived with the accents of our present and of our future. Still more legitimate is the significance of that polemic when the intention is to blame the habit of those who assume the functions of praise or blame, in relation not only to men, but to historical events. They applaud paganism, abuse

Christianity, weep over the fall of the Roman Empire, deplore the formation of Islamism, regret that Buddhism should not have been disseminated in Europe, sympathize with the Reformation, or disapprove of Catholicism after the Council of Trent. To them was addressed the saying that history is not to be judged but to be narrated. But it would be more accurate to say that history is not to be judged by the categories by which we judge the actions of individuals, which are subject to the dialectic of good and evil, because the action of an individual differs from the historical event, which transcends individual wills. But the definition of individuality and of event goes outside the gnoseology of history, and more properly belongs to the Philosophy of the Practical.[1]

The demand for a theory of historical facts.

The conviction that has been gained as to the necessity of the logical element, of concepts, criteria, or values, for the formation of narrative, has induced some to demand, not only that the historian should continually have clearly and firmly in mind the concepts that he employs and his intention in employing them, but that a *theory of historical factors* or, as

[1] See on this point my *Philosophy of the Practical*, part i. sect. ii. chaps. v.-vi.

others call it, a *table of values*, should be constructed, which should serve as foundation for historical narrative in general. The demand is exactly similar to that of the man who, observing that electricians or metal-founders employ physical forces, demands the construction of a physical theory to serve as the basis of industry; as if Physics did not exist and supply the basis for industry; or as if the sciences changed their nature, according to the men who employ them. The theory of historical factors, or the table of values, exists, and is called *Philosophy*, whose precise business it is to define *universals*, which are *factors* and not facts, and to give the table of *values*, which are *categories*. At the most this demand might be taken to suggest the recommendation of a popular philosophy, for the use of professional historians; but this too exists and is natural *good sense*. A historian who entertains doubts as to the deliverances of good sense begins to philosophize (in the restricted and professional sense of the word), and once he has done this, what is called popular philosophy no longer suffices him, or serves only to make his mental condition worse, with its insufficient nourishment. Books on the teaching of history which abound in our literature of to-day are proof of this.

Disquisitions as to the *predominance* or the *fundamental* character of this or that historical factor belong to this popular and more or less dilettante literature. In strict philosophy, such problems do not arise, or are promptly dissolved, because it is known that, since every fact of reality depends upon another fact, so also every factor, or every constitutive element of the spirit and of reality, is such only in union with other factors and elements. None of them predominates, because measures of greater or less are not used in philosophy, and none is fundamental, because all are fundamental.

Impossibility of dividing history according to its intuitive and reflective elements.

The representative and conceptual elements in historical judgment are not separable or even, strictly, distinguishable unless it is intended to dissolve the historical narrative in order to return to pure intuition. This too is a corollary of what has been said on the individual judgment. For this reason, every division of history, based upon the presence or absence of one or other of these elements, must be held to be without truth. Of this kind is the once popular division into *picturesque* and *reflective* or *thinking* history. But this division designates not two kinds of history, but rather, on the one hand, the return to indiscriminate intuition, and on the other, true history,

which is intuition thought or reflected. The same false division is sometimes expressed in the terms *chronicle* and *history*, or *narrative* and *philosophic* history.

Empirical nature of the division of the historical process into four stages.

Outside the individual judgment, there is neither subject nor predicate. Outside the narrative, which synthesizes representation and concept, and by representing gives existence and judgment, there is no history. Technical manuals usually divide the process of historical composition into four stages. The first is *heuristic*, consisting of the collection of historical material; the second *criticism* or *separation* of it; the third is *interpretation* or *comprehension*, the fourth *exposition* or *narrative*. These distinctions portray the professional historian's method of work. *First*, he examines archives and libraries, *then* he verifies the authenticity of the documents found, *then* he seeks to understand them, and *finally* he puts his thoughts on paper and pays attention to the beauty of form of the exposition. These are doubtless useful didactic distinctions. But it must be observed that so long as we do not have a historical source before us (the first stage) the very condition of the birth of history is wanting. Hence the first stage does not belong to historical work, but to the practical

stage of him who goes in search of a material object. The second stage is already a complete historical work in itself, since it consists in establishing, whether a given fact, called sincere evidence, has really taken place. The third coincides logically with the second, since it is the same thing to ascertain the value of a piece of evidence and to pronounce on the reality and quality of the facts to which it witnesses. The fourth coincides with the second and third, because it is impossible to think a narrative without speaking it, that is, without giving to it expressive or verbal form.

Divisions founded upon the historical object.

If history be not divisible on the basis of the presence or absence of the reflective or representative element, it may well be divided by taking as basis, either the concept that determines the particular historical composition, or the representative material that enters into it.

Logical division according to the forms of the spirit.

The first mode of distinction is rigorous, because founded upon the character of unity-in-distinction, proper to the pure concept. Thus, the human mind cannot think history as a whole, save by distinguishing it at the same time into the history of doing and the history of knowing, into the history of the practical activity and the history of æsthetic production, of philosophic

thought, and so on. In like manner, it cannot think any one of these distinctions, save by placing it in relation with the others, or with the whole, and thinking it in complete history. Naturally, this intimate, logical unity and distinction has nothing to do with the *books* which are called histories of the practical, philosophic, artistic activities, and the like. There the correspondence with the division of which we speak is only approximate, owing to the operation of what we called practical or economic motives. But every historical proposition, like every individual judgment, qualifies the real according to one aspect of the concept, and excludes another, or it qualifies it indeed according to all its aspects, but distinguishes them, and therefore prevents the one from intruding upon the other. The literary division of books into books of practical, philosophic, and artistic history, and so on, gets its importance from this fundamental distinction, according to which are also divided the different points of view of historians and the various interests of their readers.

Empirical division of representative material.

The second mode is, of necessity, empirical, and cannot be carried out without the introduction of empirical concepts. For otherwise it would not be possible to keep the representa-

tions of reality separate, since they constitute a continuous and compact series. By means of empirical concepts, history is divided into the history of the State, of the Church, of society, of the family, of religion (as distinct from philosophy), or of philosophy (as distinct from religion). Or, as the history of philosophy, it is divided into the history of idealism, of materialism, of scepticism; or as the history of art, into the history of painting, of poetry, of the drama, of fiction. Or again, as the history of civilization, it is divided into oriental history—history of Greece, of Rome, of the Middle Ages, of the Renaissance, of the Reformation, and so on. Even these last mentioned criteria (Greece, Rome, the Middle Ages, etc.) are empirical concepts and not representations, because, as we know,[1] the representation is individual, and when it is made constant and general it is changed into a concept of the individual, the summary and symbol of several representations, in fact, the empirical concept. Each one of these divisions is valid in so far as it is useful; and equally valid, under a like condition, are all the divisions that have been conceived, and the infinite number that are conceivable.

[1] See above, Part I. Sect. I. Chap. IV.

Empirical concepts in history and the false theory as to the function that they have there.

But the failure to understand that the true function of the introduction of empirical concepts is to divide the mass of historical facts and to regroup them conveniently for mnemonic purposes, has greatly interfered with the ideas of logicians as to the writing of history. Just as the individual judgment presupposes neither the empirical concept, nor the judgment of classification, nor the abstract concept, nor the judgment of enumeration, whereas all these forms presuppose just the individual judgment; so history does not presuppose classifications conducted from the practical point of view, or enumerations and statistics, whereas on the other hand all of these do presuppose history, and without it could not appear. We should not be deceived by finding them fused in historical works (which continually have recourse to such aids to memory), nor allow ourselves to forget that their function is *subservient*, not *constitutive*. There can be no abstract idea of the Greek, unless we have first known the individual life of the men called Pericles and Alcibiades. Nor can there be any enumeration of the Three Hundred of Thermopylæ or of the Three Hundred of Cremera, except in so far as each was known in his individual features, and then classified as a citizen

of Sparta or a Roman of the Fabian *gens*. To avail oneself of these simplifications is not to narrate history, which is already present to the spirit, but to fix it in the memory and to communicate it to others in an easier way. Those others, if they have not the capacity to recover the individual fact beneath those concepts of class and of number, will understand nothing of history, thus simplified and reduced to a skeleton for the purposes of communication.

Hence comes also the claim to reduce history to a natural science:

The positivist fiction that *history can be reduced to a science* (natural science is of course meant) arises from the false interpretation of the subsidiary character of the pseudoconcepts in history and from making them a constitutive part of it. History, on this view, would be rendered a perfect example of what it has hitherto been only in imperfect outline, a classification and statistical table of reality. The many practical attempts at such a reduction have damaged contemporary historical writing not a little, by substituting colourless formulæ and empty abstractions which are applicable to several epochs at once or to all times, for the narration of individual reality. The same tendency appears in what is called *sociologism*, and in its polemic against what it calls *psychological* or *individual*

history, and in favour of *institutional* or *social* history. Against these materialistic reductions of history, the doctrines of *accident* or of *little causes* which upset the effects of *great* causes, are efficacious and valuable, for these and suchlike absurdities have the merit of reducing that false reduction to absurdity.

and the thesis of the practical character of history.

By reason of the same erroneous interpretation there has come from philosophers who are not positivists, the theory that history is rendered possible only by the intervention of the *practical* spirit. On this view, the practical spirit, after establishing practical values, arranges beneath them the formless material and shapes it into historical narrative. But the practical spirit is impotent to produce anything in the field of knowledge; it can act only as the custodian and administrator of what has already been produced. For this reason, the theory here referred to, by appealing to the practical spirit, resolves itself into a complete negation of the value of history as knowledge. And this negation, though it was certainly not foreseen or desired by those who maintain the theory, yet is unavoidable.

In this connection, there has also been maintained the importance of the distinction between historical events and events not worthy

of history, between historical and non-historical, or between teleological and ateleological personages. Such a distinction, it has been affirmed, is afforded by the practical spirit. This is true, but for the reason already given, it amounts to removing all theoretical importance from the distinction, by emptying it of all cognitive content. In reality, for the practical economy of social work, for selecting subjects for books, or for being easily understood in our own speech, it is necessary to speak of a definite event or of a definite individual as a thing and person altogether common and unworthy of history. But it asks the brain of a pedant to imagine that the individual or the event has thereby been suppressed, we do not say from the field of reality (which would be too manifestly absurd), but from that of the *narrative of reality*, or from history. What is understood forms part of what is said; and if we did not always imply a mental reference to the men we call commonplace, and to insignificant facts, which are more or less excluded from our words, great men and significant events would also lose all meaning. Such implications are so little eliminated or eliminable, that they break out and are even verbally expressed, according to the various

Distinction between historical facts and facts that are not historical, and its empirical value.

interests that determine books on history at various times. Thus we have seen domestic and social life, neglected by the old historians, not only gradually assume importance, but throw wars and diplomatic negotiations into the shade. We have seen the so-called masses, neglected in favour of the individual genius, in their turn conquer, and almost eclipse, the heroes (which does not mean that these latter will not have their revenge). We have seen names, once hardly mentioned, become attractive and popular, and others, at one time celebrated, lose their colour and disappear from view. Even Italian histories of the most recent events afford instances of such fluctuations. For instance, in the period of the Risorgimento, the prevailing interest regarded as supremely important and historical, the formation of Italian nationality, the constitution of the middle class and of the commune, and popular rebellions against foreigners or against tyrants. Now it is the social problem and the socialist movement that dominate, and preference is given to histories of economic facts, of class struggles and of movements of the proletariat.

Practical preoccupations are so strong with any one engaged in a given trade, even though it is that of a maker of books of history, as to

suggest almost inevitably the strange doctrine of the *practical* character of history, or the non-theoretic character of that form, which is the crowning result of the theoretic spirit, and which alone gives full truth—if truth is the Knowledge of Reality, and if Reality is history.

Professional prejudice and the theory of the practical character of history.

IV

IDENTITY OF PHILOSOPHY AND HISTORY

Necessity of the historical element in philosophy.

THE necessity of philosophy as a condition of history has been made evident from the preceding considerations. It is now necessary to affirm with no less clearness the necessity of history for philosophy. If history is impossible without the logical, that is, the philosophical, element, philosophy is not possible without the intuitive, or historical element.

For a philosophic proposition, or definition, or system (as we have called it), appears in the soul of a definite individual at a definite point of time and space and in definite conditions. It is therefore historically conditioned. Without the historical conditions that demand it, the system would not be what it is. The Kantian philosophy was impossible at the time of Pericles, because it presupposes, for instance, exact natural science, which developed from the Renaissance onward. And this presupposes geographical

discoveries, industry, capitalist or civil society, and so on. It presupposes the scepticism of David Hume, which in its turn presupposes the deism of the beginning of the eighteenth century, which in its turn is connected with the religious struggles in England and in all Europe in the sixteenth and seventeenth centuries, and so on. On the other hand, if Kant were to live again in our time, he could not write the *Critique of Pure Reason* without modifications so profound as to make of it, not only a new book, but an altogether new philosophy, though containing within itself his old philosophy. Stiff with old age, he was even capable of ignoring the interpretations and developments of Fichte, and of ignoring Schelling. But to-day he could not ignore either of these, nor Hegel, nor Herbart, nor Schopenhauer. He could not even ignore the representatives of the mediæval philosophy, which followed the classical period of modern philosophy; the authors of positivist myths, Kantian and Hegelian scholastics, the new combinations of Platonism and Aristotelianism, that is, of pre-Kantian with post-Kantian philosophy, the new sophists and sceptics, the new Plotinians and Mystics, nor the states of soul and the facts, which condition all these

things. For the rest, Kant truly lives again in our days, with a different name (and what is individuality, countersigned with the name, save a juxtaposition of syllables?) He is the philosopher of our times, in whom is continued that philosophic thought, which once took, among others, the Scoto-German name of Kant. And the philosopher of our day, whether he will it or no, cannot abandon the historical conditions in which he lives, or so act as to make that not to have happened which happened before his time. Those events are in his bones, in his flesh and blood, and it is impossible to drive them out. He must therefore take account of them, that is, know them historically. The breadth of his philosophy will depend upon the breadth of his historical knowledge. If he did not know them, but merely carried them in him as facts of life, his condition would not differ from that of any animal (or of ourselves in so far as we are animals or beings that are, or rather seem to be, completely immersed in will and practice). For the animal is precisely conditioned by the whole of nature and the whole of history, but does not know it. The meaning of the demand must therefore be understood that a truthful answer may be obtained. *History*

must be known in order to obtain the truth of *philosophy*.

Historical quality of the culture required in the philosopher.

This demand is usually expressed in the formula that the philosopher must be cultured, though it is not clear what is the quality of this culture that is said to be requisite. Some, especially in our own days, would wish the philosopher to be a physiologist, a physicist, a mathematician, that is, that his brain should be full of abstractions, which are certainly not useless (everything is worth knowing, even the triviality of girls, for even that is a part of life and of reality), but which are in no direct relation to that form of knowledge which must be the condition of philosophy. This form of knowledge is, on the contrary, history; or, as it is said (with an *a potiori* intention), the history of philosophy, which of necessity as the history of a moment of the spirit, includes all history in itself, as we have shown above, when criticizing the divisions of history. That is to say, it is necessary to know the meaning of the problems of our own time, and this implies knowing also those of the past, in order not to take the former for the latter and so cause inextricable confusion. And to the extent that they can be of use according to the requirements of the problem,

we must know also the natural, physical, and mathematical sciences. But we must *not* know them *as such* and develop them as such, but rather *as historical knowledge* concerning the state of the natural sciences, of physics, and of mathematics, in order to understand the problems that they help to raise for philosophy.

Apparent objections.

It is vain to set against this the example of great philosophers without historical culture, as it is vain in the case of the necessity of historical knowledge for æsthetic criticism to bring forward instances of those who, although without any historical knowledge, have yet given far more true and more profound judgments upon art than the historically learned. If those judgments are true, then the critic supposed to be ignorant of history is not ignorant of it. He has somehow absorbed, scented in the air, divined with rapid perception those actual facts that were applicable to the given case. And, on the other hand, the so-called learned man will not be cultured, because his erudition is not lively and synthetic. The same happens in the case of those acute philosophers, who are said to be ignorant of the world and of history and of the thoughts of other philosophers. It cannot be denied that much or little history may be learned outside

the usual course of teaching by manuals and by orderly mnemonic methods. But here, too, the exceptional mode of learning confirms the rule and does not obviate the usefulness for the majority of the customary modes of learning. On the other hand, if he who is said empirically to be without historical knowledge, but is not so in a given instance, should nevertheless prove really ignorant in other instances, where his unusual way of learning is not open to him, his philosophy also suffers. For this reason, those philosophers who are ignorant of history exhibit deficiencies that have often been deplored. They burst open doors already opened, they do not avail themselves of important results, they ignore grave difficulties and objections, they fail to probe certain problems sufficiently deeply, and show themselves too insecure and too superficial in others, and so on. Thus is the customary learning of history avenged upon them: and Herbert Spencer, who would never read Plato or Kant, is rejected, while Schelling and Hegel are again in the hands of students.

Communication of history as changing of history.

Philosophy also changes with the change of history, and since history changes at every moment, philosophy at every moment is new. This can be observed even in the fact of the

communication of philosophy from one individual to another by means of speech or writing. Change at once takes place in that transmission. When we have simply created again in ourselves the thought of a philosopher, we are in the same condition as he who has enjoyed a sonnet or a melody, by suiting his spirit to that of the poet or composer. But this does not suffice in philosophy. We may attain to ecstasy by the recitation of a poem or the execution of a piece of music, just as it is, without altering it anywhere. But it does not seem possible to possess a philosophic proposition, save when we have *translated* it, as we say, *into our own language*, when in reality, relying upon its results, we formulate new philosophic propositions and solve new problems that have presented themselves in our souls. For this reason no book ever completely satisfies us. Every book quenches one thirst, only to give us a new one. So true is this, that when we have finished reading or are in course of reading, we often regret that it is impossible to speak with the author. We are led to say, like Socrates in the *Phaedrus*,[1] that written discourses are like pictures and do not answer questions, but always repeat what has already

[1] *Phaedrus*, 275.

been said. Or we lose patience, like that Paduan professor of the fifteenth century, who, commenting on the jurist Paolo, and annoyed at the difficulties, exclaimed at a certain point: "*Iste maledictus Paulus tam obscure loquitur ut, si haberem eum in manibus, eum per capillos interrogarem!*" But if instead of the dumb book, we had before us a living man, a Paolo obliged to be clear, the process would still be the same: his speech would be translated into our speech, his problem would arouse in our spirit our own problem.

The perpetuity of change.

The author of a philosophic work is, however, always dissatisfied, for he feels that his book or treatise hardly suffices for an instant, but immediately reveals itself as more or less insufficient. For this reason, to any philosopher, as to any poet, the only works of his own that bring true satisfaction are those that he has still to do. Thus every philosopher and every true artist dies unsatisfied, like Karl Marx, who, when asked in the last year of his life to prepare a complete edition of his works, replied that he had yet to write them. He alone is satisfied who at a certain moment ceases to think and takes to admiring himself, that is to say, the corpse of himself as a thinker, and is careful,

not of art or philosophy, but of his own person. Yet to no one can even this give the satisfaction he imagines, for life is no less voracious and insatiable than thought. In any case, to be satisfied, the author must become philosophically immobile in a *formula*, and the reader must content himself with this formula. Thoughts must become "obtuse and deaf," as Leibnitz called them, who defined such a spiritual condition as *psittacism*. The only consolation left to one who does not become immobile is that of reflecting, like Socrates, that his discourses will not be sterile, but fruitful. Other discourses will spring from them in his own soul and in the soul of others, in whom he has sown the *seeds*.[1] He will console himself with the thought that philosophy, like life, is infinite.

Surpassing and continuous progress of philosophy.

The infinity of philosophy, its continuous changing, is not a doing and an undoing, but a continuous *surpassing of itself*. The new philosophic proposition is made possible only by the old; the old lives eternally in the new that follows it and in the new that will follow that again and make old that other which is new. This suffices to reassure those minds which are easily led astray and inclined to lament

[1] *Phaedrus*, 276-7.

the vanity of things. Where everything is vain, nothing is vain; fullness consists precisely in that perpetual becoming vain, which is the perpetual birth of reality, the eternal becoming. Nobody renounces love because love is transitory, nor abandons thinking because his thought will give place to other thoughts. Love passes, but generates other beings, who will love. Thought passes, but generates other thoughts, which, in their turn, will excite other thoughts. In the world of thought also, we survive in our own children: in our children who contradict us, substitute themselves for us and bury us, not always with due piety.

Meaning of the eternity of philosophy.

No other meaning but this is to be found in the vaunted eternity of philosophy in regard to time and space. The eternity of every philosophic proposition must be affirmed against those who materialistically consider all propositions as valueless existences, and fugitives which leave no trace, as phenomena of brute matter, which alone persists. Philosophic propositions, though historically conditioned, are not effects produced and determined by these conditions, but creations of thought, which is continued in and through them. When they appear to be produced determinately, they must be held to

be, not philosophy, but false philosophy, vital interests masquerading as thoughts. That alone can be eternal as philosophy, which is knowledge and truth. But when eternity is misunderstood as isolation from those conditions, it must then be denied, and in place of it the thesis of relativity must be admitted, provided we are careful that it does not assume the erroneous vesture of historical materialism and economic determinism. The thesis that the history of philosophy should be treated *psychologically*, by the attribution of ideas to the temporal conditions and the personal experiences of philosophers, to social history and biography, is reducible (and it is worth while noticing this) to materialism and determinism in its least evident form, namely psychologism. Such a thesis is the failure to recognize spiritual value, or at least (as is the case with some unconscious æstheticists), the logical value of philosophy, whose history, when changed into that of the expressions of states of the soul, comes to coincide altogether with the history of poetry and literature.

The concept of spontaneous, ingenuous, innate philosophy, etc., and its meaning.

The eternity of philosophy is its truth, and the conception which is sometimes brought forward of a *spontaneous* or *ingenuous* or *innate* or *cryptic* (*abdita*) philosophy, which alone should be

permanent amid the variations of philosophic opinions, or to which the spirit should return after many wanderings, is nothing but a symbol of this truth. The Platonic theory of *reminiscence* (*ἀνάμνησις*) is reducible to this conception. In this theory true knowledge is explained as the recollection of an original state; and it is this reminiscence, as the restitution of the childish soul, that is described by our Leopardi in the following verses:

I believe that to know is very often, if we examine it, nothing but to perceive the folly of beliefs due to habit, and the careful reconquest of the knowledge of childhood, taken from us by age; for the child neither knows nor sees more than we, but he does not believe that he sees and knows.

But such philosophy and such reminiscence are really found only in propositions historically conditioned. Ingenuous philosophy and primitive knowledge are nothing but the concept itself of philosophy, fully realized in all and none. "Platonic reminiscence (explained Schelling) is the memory of that state, in which we are all one with nature." But since we are one with nature in every one of our acts, each one of them demands a special reminiscence and so a new thought. In like manner, *the state of nature*,

celebrated in moral and political doctrines (the doctrines of morality and rights), was a state of perfection which can never be found anywhere in the world or at any moment of time, because it expressed the very concept of the good, of virtue and of justice. Socrates, in another Platonic dialogue, spoke of those true beliefs (δόξαι ἀληθεῖς) as elusive like the statues of Daedalus, that disappear from the soul, unless one binds them with rational arguments, and only when thus bound do they from beliefs become knowledge.[1] Such is ingenuous philosophy, which in reality exists only when bound and never when loose and ingenuous, as the name would suggest; philosophy *abdita* exists only as philosophy *addita*. Certainly, to the consciousness of doctrinaires, obscured with too much labour, we can sometimes oppose ingenuous consciousness, and to the pedantry of scholastic treatises we can oppose the truth of proverbs, of good sense, of children, of the people, or of primitive races. But we must not forget that in all these cases ingenuous is a metaphor which designates truth in contradistinction to what is not truth.

Philosophy as criticism and polemic.

The division of philosophy into ingenuous and learned is due to its convenience and to its

[1] *Meno*, 97-8.

didactic value, and in like manner philosophy properly so-called, or *system*, is distinguished from philosophy as *criticism*. The former is looked upon as the solid and permanent part, the latter as variable and adaptable to times and places, having as its object the defence of the eternal truths conquered by the human spirit, against the wiles and assaults of error. In reality the distinction is empirical: philosophy and philosophical criticism are the same thing; every affirmation is a negation, every negation is an affirmation. The critical or negative side is inseparable from philosophy, which is always substantially a *polemic*, as can be seen from the examination of any philosophic writing. Peace-loving people are fond of recommending abstention from polemics and the expression of one's own ideas in a *positive* manner. But only the artist is capable of expressing his soul without polemic, since it does not consist of ideas. Ideas are always armed with helmet and lance, and those who wish to introduce them among men must let them make war. A philosopher, when he truly abstains from polemics and expresses himself as though he were pouring out his own soul, has not even begun to philosophize. Or, having philosophized upon certain problems, he

makes, as Plato does, the act of renunciation when he is confronted with others, feeling that he has attained to the extreme limit of his powers, and from philosophy he passes to poetry and prophecy.

Identity of philosophy and history.

Philosophy, then, is neither beyond, nor at the beginning, nor at the end of history, nor is it achieved in a moment or in any single moments of history. It is achieved *at every moment* and is always completely united to facts and conditioned by historical knowledge. But this result which we have obtained and which completely coincides with that of the conditioning of history by philosophy is still somewhat provisional. Were we to consider it definite, philosophy and history would appear to be two forms of the spirit, mutually conditioning one another, or (as has sometimes been trivially remarked) in reciprocal action. But philosophy and history are not two forms, they are one sole form: they are not mutually conditioned, but identical. The *a priori* synthesis, which is the reality of the individual judgment and of the definition, is also the reality of philosophy and of history. It is the formula of thought which by constituting itself qualifies intuition and constitutes history. History does not precede philosophy, nor philo-

sophy history: both are born at one birth. If it is desired to give precedence to philosophy, this can only be done in the sense that the unique form of philosophy-history must take the name and character, not of intuition, but of what transforms intuition, that is to say, of thought and of philosophy.

Didactic divisions and other reasons for the apparent duality.

Philosophy and history are distinguished, as we know, for didactic purposes, philosophy being that form of exposition in which special emphasis is accorded to the concept or system, and history as that form in which the individual judgment or narrative is specially prominent. But from the very fact that the narrative includes the concept, every narrative clarifies and solves philosophic problems. On the other hand, every system of concepts throws light upon the facts which are before the spirit. The confirmation of the value of a system resides in the power of interpreting and narrating history, which it displays. It is history which is the touchstone of philosophy. It is true that the two may appear to be different, owing to the external differences of books, in which only one of the two seems to be treated: and it is also true that the didactic division is based upon a diversity of aptitudes, which practice contributes to develop. But, provided always

that the meaning both of a philosophic proposition and of a historical proposition is fathomed to the bottom, their intrinsic unity is indubitable. The fact that is so often cited of conflicts between philosophy and history is in reality a conflict between two philosophies, the one true and the other false, or both partly true and partly false. Some thinkers, for instance, are idealist in recounting history and materialist in their philosophic systems. This means that two philosophies are at strife within them without either being sufficiently aware of it. And does it not also happen that we find in a philosophic exposition propositions that contradict one another and divergent systems capriciously associated in one system?

From intuition, which is indiscriminate individualization, we rise to the universal, which is discriminate individualization, from art to philosophy, which is history. The second stage, precisely because it is second, is more complex than the first, but this does not imply that it is, as it were, split into two lesser degrees, philosophy *and* history. The concept, with one stroke of the wing, affirms itself and takes possession of the whole of reality, which is not different from it, but is itself.

Note.—May I be permitted an explanation concerning the history of my thought (and also of its criticism owing to their unity already demonstrated)? Sixteen years ago I began my studies in philosophy with a memoir entitled *History beneath the general concept of Art* (1893). There I maintained, not that history is art (as others have summarized my thought) but (as indeed the title clearly showed) that history can be placed beneath the *general* concept of art. I now maintain, sixteen years after, that, on the contrary, history is philosophy and that history and philosophy are indeed the same thing. The two theories are certainly different; but they are far less different than appears, and the second theory is in any case a development and perfecting of the first. *Elle a bien changé sur la route,* without doubt; but without discontinuity and without gaps. Indeed, the objects of my memoir were chiefly: (1) to combat the *absorption* of history, which the natural sciences were then attempting more than they are now; (2) the affirmation of the *theoretic* character of art and of its *seriousness*, art being then regarded as a hedonistic fact by the prevailing positivism; (3) the negation of history as a *third form* of the theoretic spirit different from the æsthetic form and from that of thought. I still maintain these three theses intact and they form part of my *Æsthetic* and of my *Logic.* But the proper character of philosophy, so profoundly different from the empirical and abstract sciences, was not clear to me

at the time, and therefore neither was the difference between philosophic Logic and Logic of classification. For this reason I was unable completely to solve the problem that I had proposed to myself. Owing to this confusion of the true universality of philosophy and of the false universality of the sciences (which is either mere generality or abstractness) in a single group, it seemed to me that the concreteness of history could enter only the group of art, understood in its greater extension (hence the general concept of art). In this group, by means of the fallacious method of subordination and co-ordination, I distinguished history as the *representation of the real*, placing it without mediation alongside the representation of the *possible* (art in the strict sense of the word). When I understood the true relation between Philosophy and the sciences (a slow progress, because to reattain to consciousness of what philosophy truly is has been slow and difficult for the men of my generation), the nature of history also became somewhat clearer to me as I gradually freed myself from the remnants of the intellectualistic and naturalistic method. In the *Æsthetic* I looked upon that spiritual product as due to the intersection of philosophy and of art. In the *Outlines of Logic* I made another step in advance, history there appearing to me as the ultimate result of the theoretic spirit, the sea into which flowed the river of art, swelled with that of philosophy. The complete identity of history and of philosophy was, however,

always half-hidden from me, because in me the prejudice still persisted that philosophy might have a form in a certain way free from the bonds of history, and constitute in relation to it a prior and independent moment of the spirit. That is to say, something abstract persisted in my idea of philosophy. But this prejudice and this abstractness have been vanquished little by little. And not only have my studies in the Philosophy of the practical greatly helped me to vanquish them, but also and above all, the studies of my dearest friend Giovanni Gentile (to whom my mental life owes many other aids and stimulations), concerning the relation between philosophy and history of philosophy (cf. now especially *Critica*, vii. pp. 142-9). In short, I have gradually passed from the accentuation of the character of concreteness, which history possesses in relation to the empirical and abstract sciences, to the accentuation of the concrete character of philosophy. And having completed the elimination of the double abstractness, the two concretenesses (that which I had first of all claimed for history, and that which I have afterwards claimed for philosophy) have finally revealed themselves to me as one. Thus I can now no longer accept without demur my old theory, which is not the new one, but is linked to it by such close bonds.

Such is the road I have travelled, and I wished especially to describe it, in order to leave no misunderstandings which, through my neglect, might lead others into error.

V

THE NATURAL SCIENCES

The natural sciences as empirical concepts, and their practical

THE natural sciences are nothing but edifices of pseudoconcepts, and precisely of that sort of pseudoconcept that we have distinguished from the others as *empirical* or *representative.*

This is evident also from the definitions that they assume as *sciences of phenomena*, in opposition to philosophy, the science of *noumena* ; and as *sciences of facts*, again in opposition to philosophy, which is taken to be the science of *values.* But the pure phenomenon is not known to science ; it is represented by art : and the noumena, in so far as they are known, are also phenomena, since it would be arbitrary to break up unity and synthesis. In like manner, true values are facts, and, on the other hand, facts without the determination of value and of universality dissolve again into pure phenomena. Hence it is possible to conclude that those sciences offer neither pure phenomena nor mere facts, but, on

the contrary, develop representative concepts, which are not intuitions, but spiritual formations of a practical nature.

Elimination of a misunderstanding concerning this practical character.

The word "practical" having been pronounced, it behoves us to eliminate a misapprehension which leads to the natural sciences (or simply *sciences*, as they are also called) being said to be practical, in the same sense as those whose aim is action. Bacon was a fervent apostle of the naturalistic movement of modern times and full of this latter idea or preconception. He proclaimed to satiety that *meta scientiarum non alia est quam ut dotetur vita humana novis inventis et copiis*; that they propose to themselves *potentiae et amplitudinis humanae fines in latius proferre*; and that, by means of them, reality *ad usus vitae humanae subigitur*.[1] But in our day also, many theorists do not tire of repeating that the sciences are *ordonnées à l'action*. Now, this does not suffice to describe the natural sciences, because all knowledge is directed to action, art, philosophy, and history alike, which last, by providing knowledge of the actual situation, is the true and complete precedent and fact, preparatory to action.[2] The misapprehension in favour

[1] *Nov. Org.* I. §§ 81, 116; and II. in fine.

[2] See *The Philosophy of the Practical*, pt. i. sect. i.

of the natural sciences arises from the vulgar idea that the only practical things in life are eating, drinking, clothes, and shelter. It is forgotten that man does not live by bread alone, and that bread itself is a spiritual food if it increase the force of spiritual life. But further: the natural sciences, just because they are composed of empirical concepts (which are not true knowledge), do not *directly* subserve action, since in order to act it is necessary to return from them to the precise knowledge of the individual actual situation. That is to say, in ordinary parlance, *abstractions* must be set aside and it must be seen *how things* truly and properly *stand.* The patient, the individual patient, is treated, not the malady; Socrates or Callias (as Aristotle said), not man in general: *θεραπευτὸν τὸ καθ' ἕκαστον*: knowledge of *materia medica* does not suffice; the *clinical eye* is needed. The natural sciences are not directed to action, but *are*, themselves, actions: their practical character is not extrinsic, but *constitutive.* They are actions, and are therefore not directed to action, but to aid the cognitive spirit. Thus they subserve action (that is, other actions) only in an indirect way. If an action does not become knowledge, it cannot give rise to a new action.

Impossibility of unifying them in a concept.

The empirical character (and the practical character in the sense already established) of the natural sciences is commonly admitted in the case of such of them as consist in classifications of facts: for example, of zoology, botany, mineralogy, and also of chemistry, in so far as it enumerates chemical species, and of physics, in so far as it enumerates classes of phenomena or physical forces. The universals of all these sciences are quite arbitrary, for it is impossible to find an exact boundary between the concept of animal (the universal of zoology) and that of vegetable (the universal of botany). Indeed it is impossible to find one between the living and the not living, the organic and the material. Finally, the cellule, which is, for the present at any rate, the highest concept of the biological sciences, is differentiated from chemical facts only in an external way. It will be objected that there is in any case no lack of attempts to determine strictly the supreme concepts of the sciences, such, for instance, as those that place the *atom* at the beginning of all things and attempt to show each individual fact as nothing but a different aggregate of atoms. There are also those who mount to the concept of *ether* or of *energy* and declare all individual facts to be nothing but different forms of energy.

Or finally, the vitalists recognize as irreducible the two concepts of the teleological and the mechanical, of organic and inorganic, of life and matter. But in all these cases *the natural sciences are deserted*, phenomena are abandoned for noumena, and philosophic explanations are offered. These may or may not have value, but they are of no use from the point of view of the natural sciences, or at most ensure to some professor the insipid pleasure of calling an animal "a complex of atoms," heat "a form of energy," and the cellule "vital force."

Impossibility of introducing into them strict divisions.

Since the natural sciences cannot be unified in a concept (hence their ineradicable *plurality*), and therefore remain unsystematic, a mass of sciences without close relation among themselves, logical distinctions are not possible in any science. No one will ever be able to prove that genera and species must be so many and no more, or describe the truly original character by which one genus may be distinguished from another genus and one species from another species. The animal species hitherto described have been calculated at over four hundred thousand, and those that may yet be described as fifteen millions. These numbers simply express the impotence of the empirical sciences to exhaust the infinite and

individual forms of the real and the necessity in which they are placed of stopping at some sort of number, of some hundreds, of some thousands, or of some millions. Those species, however few or many they may be, flow one into the other owing to the undeniable conceivability of graduated, indeed of continuous intermediate forms, which made evident the arbitrariness of the clean cut made into fact by separating the wolf from the dog or the panther from the leopard.

Laws in the natural sciences, and so called previsions.

But some doubt is manifested where we pass from classification and description or from *system* (as the lack of system of naturalistic classifications is called, by a curious verbal paradox) to the consideration of the laws that are posited in those sciences. It is then perceived that the classification is certainly a simple labour of preparation, arbitrary, convenient, and nominalistic, but that the true end of the natural sciences is not the class but the *law*. In the compass of the law strict accuracy of its truth is indubitable; so much so that by means of laws it is actually possible to make *previsions* as to what will happen. This is indeed a miraculous power, which places the natural sciences above every form of knowledge, and endows them with an almost magical

force, by means of which man, not contented with knowing what has happened (which is yet so difficult to know), is capable of knowing even what has not yet happened, what will happen, or the future! *Prevision* (there must be a clear understanding of the concepts) is equivalent to *seeing beforehand* or *prophesying*, and the naturalist is thus neither more nor less than a clairvoyant.

Empirical character of naturalistic laws.

The miraculous nature of this boasted power should suffice to make us doubt whether the law is truly what it is said to be, a strict truth, quite different from the empirical concept, from the class, and from the description. In reality, the law is nothing but the empirical concept itself, the description, class or type, of which we have just spoken. In philosophy law is a synonym for the pure concept; in the empirical or natural sciences it is a synonym for the empirical concept; hence laws are sometimes called *empirical* laws, or laws of experience. If they were not empirical, they would not be naturalistic, but philosophic universals, which, as we have seen, are unfruitful in the field of the natural sciences. The law of the wolf is the empirical concept of the wolf: granted that in reality there is found one part of the representation corresponding to that concept, it is possible to conclude

that the rest is also found. Thus Cuvier (to choose a very trite example), arranging the types of animals and hence the laws of the correlations of organs, was able to reconstruct from one surviving bone the complete fossil animal. In like manner, granted the chemical concept of water, H_2O, and given so much of oxygen and double that quantity of hydrogen, O and H_2, and submitting the two bodies to the other conditions established by chemistry, it is possible to conclude that water will be seen to appear. All naturalistic laws are of this type. Certain naturalists and theorists have reasonably protested against the division of the natural sciences into descriptive and explicative, sciences of classification and sciences of laws, and have maintained that all have one common character, namely, law. But this is not because the law is superior to the class or to the empirical concept, but because the two things are identical: the law is the empirical concept and the empirical concept is the law.

The postulate of the uniformity of nature, and its meaning.

The postulate of the *constancy or uniformity of nature* is the base of *empirical laws or concepts.* This, too, is something mysterious, before which many are ready to bow, seized with reverence and sacred terror. But that postulate is not even an hypothesis, somehow conceivable, though

not yet explained and demonstrated. Ordinary thought, like philosophical thought, knows that reality is neither constant nor uniform, and indeed that it is perpetually being transformed, evolving and becoming. That constancy and uniformity, which is postulated and falsely believed to be objective reality, is the same *practical necessity* which leads to the neglect of differences and to the looking upon the different as uniform, the changeable as constant. The postulate of the uniformity of nature is the demand for a treatment of reality made uniform for reasons of convenience. *Natura non facit saltus* means: *mens non facit saltus in naturae cogitatione*, or, better still, *memoriae usus saltus naturae cohibet.*

Pretended inevitability of natural laws.

Another consequence of this is the inversion of the assertion (to be found everywhere in the rhetoric of the natural sciences) as to the *inexorability and inevitability* of the laws of nature. Those laws, precisely because they are arbitrary constructions of our own and give the movable as fixed, are not only not inevitable and do sometimes afford exceptions; but there *is* absolutely *no real fact*, which is not an *exception* to its naturalistic law. By coupling a wolf and a she-wolf we obtain a wolf cub, which will in time become a new wolf, with the appearance,

the strength, and the habits of its parents. But this wolf will not be identical with its parents. Otherwise how could wolves ever evolve with the evolution of the whole of reality, of which they are an indivisible part? By chemical analysis of a litre of water we obtain H_2O; but if we again combine H_2O, the water that we obtain is only in a way of speaking the same as before. For that combining and recombining must have produced some modification (even though not perceived by us), and in any case changes have occurred in reality in the subsequent moment, from which the water is not separable, and therefore in the water itself taken in its concreteness. We could consequently give the following definition: the *inexorable* laws of nature are those that *are violated at every moment*, while philosophic laws are by definition those that are *at every moment observed*. But in what way they are observed cannot be known, save by means of history, and therefore true knowledge knows nothing of previsions; it knows only facts that have really happened; of the future there can be no knowledge. The natural sciences, which do not furnish real knowledge, have, if possible, even less right (if one may speak thus) to talk of previsions.

Yet, it will be objected, it is a fact that we all form previsions, and that without them we should neither be able to cook an egg nor to take one step out of doors. That is quite true, but those alleged previsions are merely the summary of what we know by experience to have happened, and according to which we resolve upon our action. We know what has happened. We do not know, nor do we need to know, what will happen. Were any one truly to wish to know it, he would no longer be able to move and would be seized with such perplexity before life, that he would kill himself in desperation or die of fear. The egg, which usually takes five minutes to cook in the way that suits my taste, sometimes surprises me by presenting itself to my palate after those five minutes, either as too much or too little cooked; the step taken out of doors is sometimes a fall on the threshold. Nevertheless, the knowledge of this does not prevent me from leaving the house and cooking the egg, for I must walk and take nourishment. The laws of my individual being, of my temperament, of my aptitudes, of my forces, that is, the knowledge of my past, make me resolve to undertake a journey, as I did twenty years ago, to begin work upon a statue,

as I did ten years ago. Alas! I had not considered that in the meantime my legs have lost their strength and my arm has begun to tremble. By all means call the previsions made use of in these cases true or false; but do not forget that they are nothing but empirical concepts, that is to say, mnemonic devices, founded upon historical judgments. There can be no doubt that they are useful; indeed, what we maintain is that just because they are useful, they are not true. If they possess any truth, it resides in the establishment of the fact. That is to say, it does not reside in the prevision and in the law, but in the historical judgment which forms its basis.

Nature and its various meanings. Nature as passivity and negativity.

Having thus made clear the coincidence of empirical concepts and the natural sciences, we must determine exactly the meaning of the word "natural," which is used as qualifying these sciences. It has not seemed advisable to change it, since its use is so deeply rooted, although we have, on the other hand, already given its synonym in qualifying these sciences as "empirical." What is *nature*? The first meaning of "nature" is the "opposite" of "spirit," and designates the natural or material moment in relation to the spiritual, the mechanical in relation to the teleo-

logical moment, the negative moment in relation to the positive. Thus, in the transition from one form of the spirit to another, the inferior form is like matter, ballast, or obstacle, and so is the negation of the superior form. Hence reality is imagined as the strife of two forces, the one spiritual and the other material or natural. It is superfluous to repeat that the two forces are not two, but one, and that if the negative moment were not, the positive moment could not be. The pigeon (says Kant), which rises to take flight, may believe that had it not to vanquish the resistance of the air, it would fly still better. But the fact is that without that resistance, it would fall to earth. In this sense, there is no science of Nature (of matter, passivity, negation, etc.) distinguishable from that of Spirit, which is the science of itself and of its opposite, and the science of itself only in so far as it is also the science of its opposite.

Nature as practical activity.

But in another sense, *nature* is, not indeed the opposite of spirit, but something distinct *in* the spirit, and especially distinct from the cognitive spirit, as that form of spirituality and activity which is not cognitive. A non-theoretical activity, a spirituality which should not be in itself knowledge, cannot be anything but the *practical* form

of the spirit, the will. *Man makes himself nature* at every moment, because at every moment he passes from knowing to willing and doing and from willing and doing returns to knowing, which is the basis for new will and action. In this sense, the science of nature, or the philosophy of nature, could not be anything but the philosophic science of the will, the Philosophy of the practical.

Nature in the gnoseological sense, as naturalistic or empirical method.

The natural sciences have nothing to do with a philosophic knowledge of nature as will, with a Philosophy of the practical. They are, as has already been said, not knowledge of will, but will; not truth, but utility. In consequence of this, they extend to the whole of reality, theoretic and practical, to the products of the theoretic spirit, not less than to those of the practical spirit; and without knowing any of them, universally or individually, they manipulate and classify them all in the way we have seen. They have not therefore a *special object*, but *a special mode of treatment*, their object or matter being the presupposed philosophic-historical knowledge of the real. They do not treat of the material and mechanical aspect of the real, nor even of its non-theoretical, practical, volitional aspect (or what is incorrectly called the irrational aspect of it). They turn the theoretical into the practical, and by killing

its theoretic life, make it dead, material, and mechanical. Nature, matter, passivity, motion *ab extra*, the inert atom and so on, are not reality and concepts, but natural science itself in action. Mechanism, logically considered, is neither a fact nor a mode of knowing the fact. It is a non-fact, a mode of not-knowing: a practical creation, which is real only in so far as it becomes itself an object of knowledge. This is the *gnoseological* or *gnoseopractical* meaning of the word "nature," a meaning which must be kept carefully distinct from the two preceding meanings. When we speak, for instance, of *matter* or of *nature* as not existing, we mean to refer to the puppet of the naturalists, which the naturalists themselves and the philosophers of naturalism, forgetting its genesis, take for a real if not a living being. That matter (said Berkeley) is an abstraction; it is (say we) an empirical concept, and whoever knows what empirical concepts are will not pretend that matter or nature exists, simply because it is spoken about.

The illusions of materialists and dualists.

We do not claim to have supplied the full solution of the problem concerning the dualism or materialism of the real with this discussion on the theme of Logic. This solution cannot (we repeat) be expected, save from all the philosophic

sciences together, that is to say, from the complete system. But we can already see, from the logical point of view, that the dualists and materialists cannot avoid the task of showing that the nature or matter, which they elevate to a principle of the real or to one of the two principles of the real, is not: firstly, the mere negation of the spirit, nor secondly, a form of the spirit, nor thirdly, the abstraction of the natural sciences. They must also show that it answers to something conceivable and existing, outside or above the spirit. Logic can pass onward at this point, saying of materialists and dualists what Dante said of the devils and the damned struggling in the lake of burning pitch: "And we leave them thus encompassed."

Nature as empirical distinction of an inferior in relation to a superior reality.

The word "nature" has yet a fourth meaning (but this time altogether empirical), which is clear in those propositions which distinguish natural life from social life, natural men (*Naturmenschen*) or savages from civilized men, and again natural from human beings, animals from men, and so on. Nature, in this sense, is distinguished from civilization or humanity, and thus the sole reality is divided into two classes of beings: natural beings and human beings (which are sometimes also called spiritual as compared with the former, which

are called material). The vague and empirical nature of this distinction is at once perceived from the impossibility that we meet with of assigning boundaries between civilization and the state of nature, between humanity and animality. Man can be only empirically distinguished from the animal, the animal from the vegetable, and vegetables from inorganic beings, which are organic in their own way. Certainly, what are called *things* are not organic, for example a mountain or a ploughshare; but they are not organic, because they are not real, but aggregates, that is to say, empirical concepts. In the same way, a forest is not organic, though it is composed of things vegetating, nor a crowd, though composed of men. When we treat of things in the above sense, we can say with some mathematicians that *things* do not exist, but only their *relations*. Hence if the dualists feel able to affirm that the two classes of beings, natural and human, are based upon the existence of two different substances and upon the different proportions of these in each of the two classes, the task of proving the thinkability of the two substances and the different proportions of the compound falls upon them.

The distinction between nature and spirit being therefore, in this last sense, altogether empirical,

it is clear that the natural sciences (in the gnoseological or gnoseopractical sense in which we give them this name) are not restricted to the development of knowledge relating to what is called inferior reality, from the animal downwards, leaving to the sciences of the spirit the knowledge that relates to superior reality from the animal upwards, that is to say, to man. Sciences of nature and sciences of the spirit, *orbis naturalis* and *orbis intellectualis*, are also, in this case, partitions and convenient groupings. All do substantially the same thing, that is to say, they provide one single homogeneous practical treatment of knowledge.

The naturalistic method and the natural sciences as extended to superior not less than to inferior reality.

On this unity and homogeneity is based the demand so often made (especially in the second half of the nineteenth century) for the extension of *the method of the natural sciences* to the sciences of the spirit or moral sciences, the *orbis intellectualis*, for a naturalistic treatment of the productions of language and of art, or of political, social, and religious life. Thus were originated or prophesied a Psychology, an Æsthetic, an Ethic, a Sociology, *methodo naturali demonstratae*. It was necessary to draw the attention of those makers of programmes and advisers (apart from the evil philosophic intentions, positivist or

Demand for such an extension, and effective existence of what is demanded.

materialistic, which they nourished in their bosoms) to the superfluity of their demand, and gently to reprove them with the old phrase: *Quod petis in manu habes.* Since man was man and constructed pseudoconcepts and empirical sciences, these naturalistic classifications have never been limited to animals, plants, and minerals, nor to physical, chemical, and biological phenomena, but have been extended to all the manifestations of reality. Naturalistic Logic, Psychology, Linguistic Sociology and Ethics have not awaited the nineteenth century ere they should open to the sun. And (without going too far back in time, or leaving Europe) they already bore flower and fruit in the Sociology (Politics) of Aristotle, in the Grammatics of the Alexandrians, in the Poetics and Rhetoric of Aristotle himself, or of Hermagoras, of Cicero, or of Quintilian, and so on. The novelty of the nineteenth century has principally consisted in giving the names *social Physics*, or the *physico-acoustic science of language* to what was once more simply, and perhaps in better taste, called otherwise. But in saying this we do not wish to deny that certain naturalistic work has been far more copious in the nineteenth century than in Greece, and that naturalistic methods have not been applied with

singular acumen and exactitude in those fields of study. Linguistic affords a case in point, with its *phonetic laws*, by reason of which it moves so proudly among its companions.

Historical basis of the natural sciences.

The natural sciences and the empirical concepts which compose them appear therefore like a tachygraphic transcription upon living and mutable reality, capable of complete transcription only in terms of individual representations. But upon what reality? Upon the reality of the poet, or upon the clarified and existentialized reality of the historian? The constructions of the natural sciences take history for their presupposition, just as judgments of classification take individual judgments. Were this not so, their economic function would have no way of expressing itself, from lack of matter whereon to work. To employ the easy example already given, it would be of no use to the zoologist to construct types and classes of animals that were certainly conceivable, but non-existent. For while those types and classes would distract the attention from the useful and urgent task of summarizing reality historically given and known, they would not exhaust the possibilities, which are infinite. And if it appear that imaginary animals are sometimes classified, as for example griffins,

centaurs, Pegasi, and sirens, it is easy to see that this is not done in Zoology, but in another naturalistic science, — comparative Mythology, in which not animals but the imaginings of men are really classified. These too are historical facts, because they are imaginings or fancies historically given. They are not combinations of images which no people has ever dreamed of, nor any poet represented, for such, as has already been said, would be infinite in number and food for mere diversion.

The question as to whether history is the foundation or the crown of thought.

History, which has philosophy for its foundation, becomes in its turn foundation in the natural sciences. This explains why, with the controversy as to whether history be a science or an art, there has always been inextricably connected the other question as to whether history be the foundation of science or science the foundation of history. The question finds a solution in the solution of the ambiguity of the term "science," which is used indifferently, sometimes in the sense of philosophy, sometimes in that of the natural sciences. If science is understood as philosophy, history is not its foundation, indeed philosophy is the foundation of history. Both mingle and are identified in the sense already explained. If science is understood as naturalistic science,

then history is its necessary foundation or precedent. Certainly, naturalistic classifications are also reflected in historical narrative; but, as we have seen, they do not perform a constitutive function in it; they are of merely subsidiary assistance.

Naturalists and historical research.

But since history is the foundation of the natural sciences, and the special treatment of perceptive material or historical data by these sciences does not possess theoretic value, but is valuable merely as a convenient classification, it is clear that the whole content of truth of the natural sciences (the measure of truth and reality that at bottom they contribute) is history. Therefore it is not without reason that the natural sciences or some of them have been called in the past *natural history*. History is the hot and fluid mass, which the naturalist cools and solidifies by pouring it into formal classes and types. Previous to this manipulation, the naturalist must have thought as a historian. The matter thus cooled and solidified for preservation and for transport has no theoretic value, save in so far as it can again be rendered hot and fluid. Similarly, on the other hand, it is necessary to revise continually the classifications adopted, returning to the observation of facts, to simple

intuitions and perceptions, to the historical consideration of reality. The *naturalist* who makes a discovery, in so far as he is a discoverer of truth, is a *historical* discoverer; and revolutions in the natural sciences represent progress in historical knowledge. Lamarckianism and Darwinism may serve as an example of this. Naturalists (and we use the word in its ordinary meaning, applying it to those who explore this "fair family of plants and animals," and what is called in general the physical world) feel themselves somewhat humiliated when described as classifiers careless of truth. But if such classification is exactly what the natural sciences accomplish from the gnoseological point of view, yet naturalists as individuals and as corporations of students exercise a far more substantial and fruitful function. The historical foundation of the life of the natural sciences is also found in the fact that a change of historical conditions sometimes renders, if not wholly useless, at least less useful, certain classifications made with the object of controlling conditions of life remote from us, or perceptions concerning life that have now been abandoned. This has occurred with regard to the classifications of alchemy and of astrology, and also (passing on to examples from

other empirical sciences) to the descriptive and casuistic portions of feudal law. When the book is no longer read, the *index* also falls into disuse.

The prejudice as to the non-historicity of nature.

The strangest of statements, that *nature has no history*, comes from forgetting the historical foundation of the natural sciences, from ignorance that it constitutes their sole truth, and from attributing theoretic importance to classifications which have merely practical importance. In this case, nature signifies that reality, from man downwards, which is empirically called inferior reality. But how, if it is reality, is it without history? How, if it is reality, is it not becoming? And further, the thesis is confuted by all the most attentive studies of so-called inferior reality. To limit ourselves to the animal kingdom, a century before Darwin the acute intellect of the Abbé Galiani shook itself free of this prejudice as to the immobility of animals. He remarks in certain places about cats: "*A-t-on des naturalistes bien exacts qui nous disent que les chats, il y a trois mille ans, prenaient les souris, préservaient leurs petits, connaissaient la vertu médicinale de quelques herbes, ou, pour mieux dire, de l'herbe, comme ils font à présent? . . . Mes recherches sur les mœurs des chattes m'ont donné des soupçons très forts qu'elles sont perfectibles; mais au bout d'une*

longue traînée de siècles, je crois que tous que les chats savent est l'ouvrage de quarante à cinquante mille ans. Nous n'avons que quelques siècles d'histoire naturelle : ainsi le changement qu'ils auront subi dans ce temps, est imperceptible."[1] This slight perceptibility of the relative changes of what is called nature or inferior reality has contributed to that prejudice (not to mention the confusion between the fixity that belongs to naturalistic classifications and reality, which is always in motion). Nature appears to be motionless, just because of the slight interest that we take in the shadings of its phenomena and in their continuous variation. But not only is nature not motionless, but it is not even true that it proceeds (as the poet says) "with steps so slow that it seems to stand still." The movement of nature or inferior reality is fast or slow, neither in less nor greater degree than human reality, according to the various arbitrary constructions of empirical concepts which are adopted, and according to the variable and arbitrary standards of measurement which are applied to them. We watch with vigilant eye every social movement that can cause a variation in the price of grain or the value of Stock Exchange securities; but we

[1] Letter to d'Epinay, October 12, 1776.

do not surprise with equally vigilant eye the revolutions that are prepared in the bosom of the earth or among the green-clad herbs of the field.

The philosophic foundation of the natural sciences, and the efficacy of the philosophy that they contain.

But if history is the foundation of the natural sciences, it follows from this that those sciences are always based upon a philosophy. This is indubitable, for the naturalist, however much he be a naturalist, is above all things a man, and a man without a philosophy (or what comes to the same thing, without a religion) has not yet been found. This does not mean that the natural sciences are philosophy. Their special task is classification, and here they are just as independent and autonomous as philosophy is incompetent. But philosophy is competent in philosophy, and so we see that those naturalists who possess philosophic culture avoid the prejudices, errors, and absurdities that spring from bad philosophies, and to which other naturalists are prone. For instance, if the chemist Professor Ostwald had possessed a better philosophy, he would not have abandoned his good chemistry for that doubtful mixture of things—his *Philosophy of Nature.* And had Ernest Haeckel made an elementary study of philosophy, he would never have given up his researches upon micro-organisms, in order to solve the riddles of the universe and to falsify

the natural sciences. Let us limit ourselves to these instances, for our life of to-day supplies innumerable examples of philosophizing men of science, who are as pernicious to science as they are to philosophy and to culture. The antithesis between science and philosophy, of which so many speak, is a dream. The antithesis is between philosophy and philosophy, between true philosophy and that which is very imperfect and yet very arrogant, and manifestly active in the brains of many scientists, though it has nothing to do with the discoveries made in laboratories and observatories.

Action of the natural sciences upon philosophy, and errors in conceiving such relation.

The action of philosophy upon the natural sciences is not constitutive of them, but preparatory. The action of the natural sciences upon philosophy is not even preparatory, but merely incidental and subsidiary, having for its end simplicity of exposition and of memorizing, just as in history. A very common error, derived from a too hasty analysis of the forms of spiritual life, is that of looking upon the empirical and natural sciences as a *preparation* for philosophy. But in the achievement of the natural sciences, philosophy has been cold-shouldered, and to recover it we must seek pure intuition, which is the necessary and only precedent of logical thought.

Still worse is it, when the natural sciences are considered, not only as preparation, but just as a first sketch, or a chiselling of the marble block, from which philosophy will carve the statue. For this view denies without being aware of it, either the autonomy of the natural sciences, or that of philosophy, according as either the philosophic method or the naturalistic method is held to be the method of truth.

Indeed, in the first case, if the natural sciences be of a philosophic nature and represent a first approximation to philosophy, they must disappear when philosophy is evolved, as the provisional disappears before the definite, as the proof before the printed book. This would mean that natural sciences as such do not exist and that what really exists is philosophy. In the second case, if philosophy have the same nature as the natural sciences, the further development of the first sketch will always be the work of the naturalistic method, however refined and however increased in power we may please to imagine it. Thus, what would really exist would never be philosophy, but always the natural sciences. This erroneous conception therefore reduces itself to a denial, either of the natural sciences or of philosophy; either of the pseudoconcepts or of

the pure concepts; a negation that need not be confuted, because the whole of our exposition of Logic is its explicit confutation.

Motive of these errors: naturalistic philosophy.

The genesis of such a psychological illusion resides in the fact that the natural sciences seem to be tormented with the thirst for full and real truth, and philosophy, on the other hand, to be intent solely upon correcting the perversions and inexactitudes of the empirical and natural sciences. But it is a question of likeness or appearance only, because the thirst for truth belongs not to the natural sciences, but to philosophy, which lives in all men, and also in the naturalist. And the philosophic perversions and inexactitudes which have to be corrected do not form part of the natural sciences (which as such affirm neither the true nor the false), but to that philosophy which the naturalist forms and into which he introduces the prejudices derived from his special business.

Philosophy as destroyer of naturalistic philosophy, but not of the natural sciences. Autonomy of these.

The proof of the theory here maintained is that even when philosophy engages in strife with naturalistic prejudices, it dissolves those prejudices, but does not and could not dissolve the sciences which had suggested them. Indeed, a philosopher becoming again a naturalist, cultivates those sciences successfully, just as his

philosophizing does not forbid his going into the garden and there scenting and pruning the plants. The naturalistic sciences of language and of art, of morality, of rights and of economics (to take instances from the intellectual world, which seem to have closer contact with philosophy), are not only what is called the *empirical stage* of the corresponding philosophic disciplines, but persist and will persist side by side with them, because they render services which cannot be replaced. Thus there is no philosophy of language and of art which can expel from their proper spheres, even if it does expel them from its own, empirical Linguistic, Grammar, Phonetics, Morphology, Syntax, and Metric, with their empirical categories, which are useful to memory. Nor can they eliminate the classifications of artistic and literary kinds, and those of the arts according to what are called means of expression, by means of which it is possible to arrange books on shelves, statues and pictures in museums, and our knowledge of artistic-literary history in our memories. Psychology, an empirical and natural science, certainly does not make us understand the activity of the spirit; but it permits us to summarize and to remember very many effective manifestations of the spirit, by classifying as well

as may be the species or classes of facts of representation (sensations, intuitions, perceptions, imaginings, illusions, concepts, judgments, arguments, poems, histories, systems, etc.), facts of sentiment, and volitional facts (pleasure, pain, attraction, repulsion, mixed feelings, desires, inclinations, nostalgias, will, morality, duties, virtue, family, judicial, economic, political, religious life, etc.), or by classifying these same facts according to groups of individuals (the Psychology of animals, of children, of savages, of criminals, and of man, both in his normal and abnormal conditions). This wholly extrinsic mode of consideration, which is now prevalent in Psychology, is the source of the remark that it has risen (or has sunk?) *to the level* of a natural science, and that its method is mechanical, determinist, positive, antiteleological. Sociology, understood not as a philosophic science (—there is no such thing—), but as an empirical science, classifies as well as may be the forms of family and the forms of production, the forms of religion, of science and of art, political and social forms, and constructs series of classifications to summarize the principal forms which human history has assumed in the course of its development. The philosopher expels these classifications from philosophy, as

extraneous elements causing pathological processes; but that same philosopher, in so far as he is a complete man, and in so far as he provides for the economy of his internal life and for more easy communication with his fellows, must fashion and avail himself of the empirical. Having ideally destroyed the adjective and the adverb, the epic and the tragic kinds, the virtues of courage and of prudence, the monogamous and the polygamous family, the dog and the wolf, he must yet speak when necessary of adjectives and adverbs, of epics and tragedies, of courage and of prudence, of families formed in this or that way, of the species "dog," as though it were clearly distinguished from the species "wolf."

Thus is confirmed the autonomy and the peculiar nature of the empirical or natural sciences, indestructible by philosophy as philosophy is indestructible by them.

VI

MATHEMATICS AND THE MATHEMATICAL SCIENCE OF NATURE

The idea of a mathematical science of nature.

THE conception of a *mathematical science of nature* is at variance with the thesis that recognizes the ineliminable historical foundation of the natural sciences and the consequences which follow from it. It is claimed that this mathematical science, in expressing the ideal and end of the natural sciences, would express also their true nature, which is not empirical but abstract, not synthetic but analytic, not inductive but deductive. The mathematical conception of the natural sciences would imply perfect mechanism, the reduction of all phenomena to quantity without quality, the representation of each phenomenon by means of a mathematical formula, which should be its adequate definition.

Various definitions of mathematics.

But the nature of mathematics cannot be considered a mystery in our time. Mathematics (as has lately been said with a subtlety equal to

its truth) is a science "in which it can never be known *what* we are talking about, nor whether what we are talking about be *true*." These affirmations are made one after the other by all mathematicians who are conscious of their own methods. In what sense can a process that merits such a description be called a science? A science that states no sort of truth does not belong to the theoretic spirit, since it is not even poetry; and a science which is not related to anything is not even an empirical science, which is always related to a definite group of representations. For this reason, others incline to consider mathematics sometimes as *language*, sometimes as *logic*. But mathematics is neither language in general nor any special language; it is not language in the universal sense, coextensive with expression and with art; nor is it a historically given language, which would be a contingent fact; nor a class of languages (phonetic, pictorial, or musical language, etc.), which would be an approximate and empirical definition, inapplicable in a function like mathematics, which expresses its own original nature. It is not logic, because there is only one logic, and thought thinks always as thought. If it is maintained, on the other hand, that the human

spirit has also a special logic, which is that of mathematicizing, a return is made to the problem to be solved, namely, what is mathematicizing? that is to say, this logic, which is not the logic of thought, because it does not give truth, and is not the logic of the empirical sciences, because it does not depend upon representations.

Mathematical process.

Any sort of arithmetical operation can serve as an example of mathematical process. Let us take the multiplication: $4 \times 4 = 16$. The sign = (equals) indicates identity: 4×4 is identical with 16, as it is identical with an infinite number of such formulæ, since there can be infinite definitions of every number. What do we learn from such an equivalence concerning the reality, phenomenal or absolute, to which the human mind aspires? Nothing at all. But we learn how to substitute 16 for 8×2, for $9+7$, for $21-5$, for $32 \div 2$, for 4^2, for $\sqrt{256}$, and so on. One or the other substitution is of service, according to circumstances. When, for instance, some one promises to pay us 4 lire daily, and we wish to know the total amount of lire, that is to say, the object that we shall have at our disposal after four days, we shall carry out the operation $4 \times 4 = 16$. Again, when we have 32 lire to divide into equal parts between our-

selves and another, we shall have recourse to the formula: $32 \div 2 = 16$. Mathematics as Mathematics does not know, but establishes formulæ of equality; it does not subserve knowing, but counting and calculating what is already known.

Apriority of mathematical principles.

For counting and calculating Mathematics requires formulæ, and to establish these it requires certain fundamental principles. These are called in turn definitions, axioms, and postulates. Thus arithmetic requires the number series, which beginning from unity, is obtained by always adding one unit to the preceding number. Geometry requires the conception of three dimensional spaces, with the postulates connected with it. Mechanics requires certain fundamental laws, such as the law of inertia, by which a body in motion, which is not submitted to the action of other forces, covers in equal times equal spaces. There has been much dispute as to whether these principles are *a priori* or *a posteriori*, pure or experimental; but the dispute must henceforth be considered settled in favour of the former alternative. Even empiricists distinguish mathematical principles from natural or empirical principles, as at least (to use their expression) *elementary experiences*, as experiences which man completes in his own

spirit, in isolation from external nature. This means, whether they like it or no, that they too distinguish them profoundly from *a posteriori* or experimental knowledge. The *a priori* character of mathematical principles is made manifest by every attack upon it.

Contradictory nature of these a priori principles. Their unthinkability,

But when they are recognized as being not *a posteriori* and empirical, but *a priori*, difficulties are not thereby at an end. The apriority of those principles possesses other most singular characteristics, which render them unlike the *a priori* knowledge of philosophy, the consciousness of universals and of values, for instance, of logical or of moral value. For if it is impossible to think that the concepts of the true and of the good are not true, on the other hand it is *impossible to think that the principles of mathematics are true.* Indeed, when closely considered, they prove to be all of them altogether false. The number series is obtained by starting from unity and adding always one unit; but in reality, there is no fact which can act as the beginning of a series, nor is any fact detachable from another fact, in such a way as to generate a discrete series. If mathematics abandons the discrete for the continuous, it comes out of itself, because it abandons quantity for quality, the

irrational, which is its kingdom, for the rational. If it remains in the discrete, it posits something unreal and unthinkable. Space is characterized as constituted of three or more dimensions; but reality gives, not this space, thus constituted, made up of dimensions, but spatiality, that is to say, thinkability, intuitibility in general, living and organic extension, not mechanical and aggregated. Its character is not to have three dimensions, one, two, three, but to be spatiality, in which all the other dimensions are in the one, and so there are not distinguishable and enumerable dimensions. And if the three or more dimensions as attributes of space prove to be unthinkable, and also the point without extension, the line without superficies, and the superficies without solidity—so too in consequence are all the concepts derived from them, such as those of geometrical figures, none of which has, or can have, reality. No triangle has, or can have, the sum of its angles equal to two right angles, because no triangle has existence. Hence those geometrical concepts are not completely expressed in any real fact, since they are in none, thereby differing from the philosophic concepts, which are all in every instant and are not completely expressed in any instant. Similar results follow

in the case of the principles of Mechanics. No body can be withdrawn from the action of external forces, because every body is connected with all the others in the universe; hence the law of inertia is unthinkable.

and not intuitible.

As they are unthinkable, so are the principles of mathematics unimaginable; they have therefore been ill defined as imaginary entities, for they would in that case lose such *a priori* validity as they have. They are *a priori*, but without the character of truth—they are organized contradictions. Had mathematics (said Herbart) to die because of the contradictions of which it is composed, it would have died long ago.[1] But it does not die of them, because it does not set itself to think them, as a venomous animal does not die of its own poison, because it does not inoculate itself. Were it to pretend to think them and to give them as true, those contradictions would all become falsities.

Identification of mathematics with abstract pseudoconcepts.

Now, a function which organizes theoretic contradictions without thinking them, and so without falling into contradictions, is not a theoretic, but a practical function, and is perfectly well known to us as that particular productive form of the practical spirit which creates

[1] *Introduction to Philosophy*, Italian tr., Vidossich, p. 272.

pseudoconcepts. But since those contradictions are *a priori* and not *a posteriori*, pure and not representative, mathematics cannot consist of those pseudoconcepts which are representative or empirical concepts. It remains, therefore, that it consists of the other form of pseudo-concepts, which are *abstract* concepts, which we have already defined as altogether void of truth and also void of representation, as analytic *a priori* and not synthetic *a priori*. And we have demonstrated how, in the falsification or practical reduction of the pure concept, concreteness without universality, that is to say, mere generality, belongs to empirical concepts, and universality without concreteness, that is to say, abstraction, to abstract concepts.

Such indeed are the fictions of mathematics; —they have universality without concreteness, and therefore feigned universality. Inversely to the natural sciences, which give the value of the concept to representations of the singular, although they succeed in doing so only by con-vention, mathematics gives the value of the single to concepts, also succeeding in this only by convention. Thus it divides spatiality into dimensions, individuality into numbers, movement into motion and rest, and so on. It also creates

fictitious beings, which are neither representations nor concepts, but rather concepts treated as representations. It is a devastation, a mutilation, a scourge, penetrating into the theoretical world, in which it has no part, being altogether innocuous, because it affirms nothing of reality and acts as a simple practical artifice. The general purpose of that artifice is known; it is to aid memory. And the particular mnemonic purpose of this is at once evident; it is to aid the recall to memory of series of representations, previously collected in empirical concepts and thus rendered homogeneous. That is to say, they serve to supply the abstract concepts, which make possible the judgment of enumeration; to construct instruments for counting and calculating and for composing that sort of false *a priori* synthesis, which is the enumeration of single objects.

The ultimate end of mathematics: to enumerate and consequently to aid the determination of the single. Its place.

Applying thus to mathematics what has been said of the judgment of enumeration, it is now clear that it facilitates the manipulation of knowledge as to individual reality. Calculation indeed presupposes: (1) perceptions (individual judgments); (2) classifications (judgments of classification); and only by means of these latter does it attain to the first. But it must attain to the

first, because were there no single things to recall to the mind, calculation would be vain. Quantification would be sterile fencing, if it did not eventually arrive at qualification.

Mathematics is sometimes conceived as the special instrument of the natural sciences, *appendix magna* to the natural sciences, as Bacon called it; but from what has been said, we must not forget that both taken together, because co-operating, constitute an *appendix magna* or an *index locupletissimus* to history, which is full knowledge of the real. It is further altogether erroneous to present mathematics as a prologue to all knowledge of the real, to philosophy and to the sciences, for this confuses head with tail, *appendix* and *index*, with text and preface.

Particular questions concerning mathematics.

It does not form part of the task that we have undertaken further to investigate the constitution of mathematics and to determine whether there be one or several mathematical sciences; if one be fundamental and the others derived from it; if the Calculus include in itself Geometry and Mechanics, or if all three can be co-ordinated and unified in general mathematics; if Geometry and Mechanics be pure mathematics, or if they do not introduce representative and contingent elements (as seems to be without doubt the case

in mathematical Physics); and so on. Suffice it that we have established the nature of mathematical science and furnished the criterion according to which it can be discerned if a given formation be mathematics or natural science, if it be pure or applied mathematics (concept or judgment of enumeration, scheme of calculation, or calculation in the act). And for this reason we shall not enter into the solution of particular questions, like those concerning the number of possible fundamental operations of arithmetic, or concerning the nature of the calculus of infinitesimals, and whether, in this, there be any place for non-mathematical concepts, that is, the philosophic, not the quantitative infinite, or, again, concerning the number of the dimensions of space. As to the use of mathematics, it concerns the mathematician who knows his business to see what arbitrary distinctions it suits him to introduce, and what arbitrary unifications to produce, in order to attain certain ends. For the philosopher, these unifications and those distinctions, if transported into philosophy, are all alike false, and all can be legitimate, if employed in mathematics. If three dimensions of space are arbitrary but convenient, four, five and *n* dimensions will be arbitrary, and the only

question that can be discussed will be whether they are convenient. Of this the philosopher knows nothing, as indeed he is sure *a priori* is the case.

Rigour of mathematics and rigour of philosophy. Loves and hates of the two forms.

Practical convenience suggests the postulates to mathematics; but the purity of the elements that it manipulates gives to them the rigour of demonstrations, the force of truth. It is a curious force, that has a weakness for point of support,—the non-truth of the postulate, and reduces itself to a perpetual tautology, by which it is recorded that what has been granted has been granted. But the rigour of the demonstrations and the arbitrariness of the foundations explain how philosophers have been in turn attracted and repelled by mathematics. Mathematics operating with pure concepts is a true *simia philosophiae* (as it was said of the devil that he was *simia Dei*), and philosophers have sometimes seen in it the absoluteness of thought and have saluted it as sister or as the first-born of philosophy. Other philosophers have recognized the devil in that divine form, and have addressed to it the far from pleasant words that saints and ascetics used to employ on similar occasions. Hence mathematics has been accused of not being able to justify its own principles.

notwithstanding its rigorous procedure; and of constructing empty formulæ and of leaving the mind vacant. It has been accused of promoting superstition, since the whole of concrete reality lies outside its conventions, an unattainable mystery; and of being too difficult for lofty spirits, just because it is too easy.[1] Gianbattista Vico confessed that having applied himself to the study of Geometry, he did not go beyond the fifth proposition of Euclid, since "that study, proper to minute intellects, is not suitable to minds already made universal by metaphysic."[2] But these accusations are not accusations, and simply confirm the peculiar nature of those spiritual formations, eternal as the nature of the spirit is eternal.

Impossibility of reducing the empirical sciences to mathematics, and empirical limits of the mathematical science of nature.

The nature of mathematics being explained, we can now resume the thread of the narrative, left hanging loose, and discover how inadmissible is the claim for a mathematical science of nature, which should be the true end and the inner soul of the empirical and natural sciences. It is said that this mathematical science presides, as an ideal, over all the particular natural sciences, but it should be added, as an unrealized and unrealiz-

[1] There is a curious collection of judgments adverse to mathematics in Hamilton, *Fragments philosophiques*, tr. Plisse, Paris, 1840, pp. 283-370.

[2] Autobiography in *Works*, Ferrari, 2nd edition, iv. p. 336.

able ideal, and therefore rather an illusion and a mirage than an ideal. It is urged that this ideal has been partially realized, and that therefore nothing prevents its being altogether realized. But, indeed, whoever looks closely will see that it has not been even partially realized, because mathematical formulæ of natural facts are always affected by the empirical and approximate character of the naturalistic concepts which they use, and by the intuitive element upon which these are based. When it is sought to establish in all its rigour the ideal of the mathematical science of nature, it becomes necessary to assume as a point of departure elements that are distinct, but perfectly identical and therefore unthinkable; quantity without quality, which are nothing but those mathematical fictions of which we have spoken. The idea of a mathematical science is thus resolved into the idea simply of mathematics, and the much-vaunted universality of that science is the universal *applicability* of mathematics, wherever there are things and facts to number, to calculate and to measure. The natural sciences will never lose their inevitable intuitive and historical foundation, whatever progress may be made in the calculus and in the application of the calculus. They will remain, as has been

said, *descriptive* sciences (and this time it has been well said, as it prevents the failure to recognize the intuitive elements, of which they are composed).

Decreasing utility of mathematics in the most lofty spheres of the real.

We have already illustrated the slight perceptibility of differences (or the slight interest that we take in individual differences), as we gradually descend into what is called nature or inferior reality. On this is founded the illusion that nature is invariable and without history. And it also explains why mathematics has seemed more applicable to the *globus naturalis* than to the *globus intellectualis*, and in the *globus naturalis*, to mineralogy more than to zoology, to physics more than to biology. Still, mathematics is equally applicable to the *globus intellectualis*, as, for instance, in Economics and Statistics. And, on the other hand, it is inapplicable to both spheres, when they are considered in their effective truth and unity as the *history of nature* or the *history of reality*, in which nothing is repeated and therefore nothing is equal and identical. Beneath that difference of applicability there is nothing but a consideration of utility. If the grains of sand on which we tread can be considered (although they are not) equal to one another, it happens less frequently that we regard

those with whom we associate and act in the same light. Hence the *decreasing utility* of naturalistic constructions (and of mathematical calculation), as we gradually approach human life and the historical situation in which we find ourselves. Decreasing but never non-existent, for otherwise, neither empirical sciences (grammars, books on moral conduct, psychological types, etc.) nor calculations (statistics, economic calculations, etc.,) would continue in use. A constructor of machines needs little intuition, but much physics and mechanics. A leader of men needs very little mathematics, little empirical science, but much intuitive and perceptive faculty for the vices and value of the human individuals with whom he has to do. But both little and much are empirical determinations; the Spirit, which is the whole spirit in every particular man and at every particular instant of life, is never composed of measurable elements.

VII

THE CLASSIFICATION OF THE SCIENCES

The theory of the forms of knowledge and the doctrine of the categories.

THE explanations given as to the various forms of knowledge are also explanations concerning the categories of the theoretic and theoretic-practical spirit: the intuition, the concept, historicity, type, number; and also quality and quantity and qualitative quantity, space, time, movement, and so on. They form part of that doctrine of the categories, in which the account of philosophy in the strict sense is completed. To ask what mathematics or history is, means to search for the corresponding categories; to ask what is the relation between history and mathematics, and in general how the various forms of knowledge are related to one another, means to develop genetically all these forms, which is precisely what we have attempted.

But the difficult enquiry as to the forms of knowledge as categories has not been much in favour in recent times. Another problem has, on

the other hand, acquired vogue. It has seemed more easy, but that is not so, because though artfully disguised, it is at bottom identical with the preceding problem. Instead of putting the question in the manner indicated above, which implies seeking out the constitution of the theoretic spirit, a modest request has been made for a classification of the various forms of knowledge, a *classification of the sciences.*

The problem of the classification of the sciences and its practical nature.

Scant confidence in philosophic thought, and excessive confidence in naturalistic methods, have so operated that, unable to renounce the necessity of dominating the chaos of the various competing sciences and not wishing to have recourse to philosophic systematization, an attempt has been made to classify the sciences like minerals, vegetables, and animals. Even now there exist writers occupying professorships who claim to be specialists in classifying sciences. Volumes on this theme appear with an unprofitable frequency and abundance.

Certainly, if such writers and professors were to proceed in an altogether empirical manner, corresponding with their declarations, nothing could be said against their labours, beyond advising them not to discuss them philosophically in order that they may not waste time in mis-

False philosophic character that it assumes.

understandings, and to recognize their slight utility. But, as a fact, none of them contains himself within empirical limits, but each gives some philosophic and rational basis to the classification which he proposes. Thus there appear bipartitions of the sciences into *concrete* and *abstract*, into *historical* and *theoromatic* (or nomotechnical), into sciences of the *successive* and sciences of the *coexistent*, or into *real* and *formal*; or *tripartitions*, into sciences of *fact*, of *law* and of *value*; into *phenomenalist*, *genetic* and *systematic* sciences; and into similar partitions and groups, of which some are old acquaintances and correspond to functions of the spirit that we have already distinguished, while others, on the contrary, must be held to be false, because they confuse under the same name functions that are different and divide functions that are unique. But all of them, true or false, leave the empirical and direct themselves to the problem of Logic and of theoretic Philosophy. This is not the place to criticize them, because substantially it has already been done in the course of the exposition of our theories; and what is left would reduce itself to a criticism of minute errors, which finds a more suitable place in reviews dealing with books of the day than

in philosophic treatises. So true is it that those classificatory systems pass with the day that witnessed their birth.

Coincidence of that problem with the search for the categories, when understood in a strictly philosophic sense.

We are concerned only to demonstrate more clearly that the demand inherent in such attempts is identical with that which leads to the establishing of a doctrine of the categories or a philosophic system. It is indeed possible to discover now and then in the demands for a classification of the sciences, two demands, the one limited, the other wider. The first takes the form of a demand for a classification of the forms of knowledge, as in the Baconian system, and in the others which repeat the type. Here the sciences are divided according to the three faculties, memory (natural and civil history), imagination (narrative, dramatic and parabolical poetry), and reason (theology, philosophy of nature and philosophy of man). The other tends to a classification not according to gnoseological forms alone, but according to objects, according to all the real principles of being, as in the system of Comte and in those derived from it. Now a classification of the first kind coincides with researches relating to the forms of the theoretic spirit, and the problems that it exposes cannot be solved save by penetrating into the problems

of these forms. Otherwise it is not possible to say if, for example, the Baconian classification be exact or no, and if not, where it should be corrected. But in passing to the other form of classification, according to objects or to the real principles of being, we pass from the sea to the ocean, because that coincides with the entire philosophic system. The classification of Comte, for example, is his positivism itself, and it is not possible to accept or refute or evaluate the one, without accepting or refuting or submitting to examination the other. There are people who ingenuously believe that they can understand things by representing them on a sheet of paper, in the form of a genealogical tree or of a table rich in graphic signs of inclusion and exclusion. But when we seriously engage upon the work, we perceive that in order to draw up the tree and construct the table, it is above all things needful to have understood them. The pen falls from the hand and the head is obliged to bend itself in meditation, when it does not prefer to abandon the dangerous game and amuse itself in other ways.

Forms of knowledge and literary-didactic forms.

And this is just the occasion to make clear the distinction that we have on several occasions employed, between forms of knowledge and

literary or didactic forms of knowledge, between the orders of knowledge and books. The arrangement of books is not always determined solely by the demand for the strict treatment of a determinate problem; very frequently, its motive is supplied by the practical need of having certain different pieces of knowledge collected together, in order not to be obliged to go and search for them in several places, that is to say, in their true places. Thus, side by side with scientific treatises properly so-called, are to be found scholastic compilations and manuals. Such are Geographies, Pedagogies, juridical or philological Encyclopædias, Natural Histories, and so on. Authors, even outside strictly scholastic limits, used formerly to consider it convenient sometimes to isolate, sometimes to unite certain orders of knowledge, and to baptize the mutilation or mixture with a particular name. It is evident that when dealing with these hybrid compilations and formations the philosopher and the historian of the sciences, who seek not books, but ideas, must carry out a series of analyses and syntheses, of disassociations and associations, without allowing themselves to be seduced by the authority of the writers or by the

solidity of these mixtures, which have become traditional.

Prejudices arising from these last.

But it is not an easy matter. Those mixtures are no longer ingenuous, nor are the practical motives that have determined them apparent. Around them has grown up a dense forest of philosophemes, of capricious distinctions, of false definitions, of imaginary sciences, of prejudices of every sort. Any one who has succeeded in discerning the genuine connections and attempts to separate the interlaced boughs, to isolate the trees and to show the different roots, any one who sets an axe to those wild tree-trunks, is horrified by cries and complaints, not less resonant than those that drove Tancred from the enchanted wood. And there is the traditionalist who admonishes us severely not to divide *natural* groupings and not to introduce among them our own *caprice*. Thus he calls the capricious natural and the natural capricious. "What?" (has recently written the shocked Professor Wundt) "for the excellent reason that the search for the individual is historical search, must Geology be considered history and research relating to the glacial epoch be abandoned to the amiable interest of the historian?" And others lament that the ancient *richness* of the

sciences is destroyed by these simplifications, and call the confusion richness.

Methodical prologues to Scholastic Manuals and their powerlessness.

It is true that in order to obviate the evil of confusion and the defective consciousness of the various kinds of research which have been mingled together, many authors are in the habit of prefixing to their books theoretic introductions, about the *method*, as they call it, of their science. The special logic of the individual disciplines is to be sought (they say) in the books that treat of these. Manuals in the German language are especially notable for this arrangement, preceded, as they are, by the heaviest introductions, which occupy a great part of the volume or of the volumes of the book. They present a contrast to French and English books, which usually enter at once *in medias res*. This arrangement seems preferable: the German type has against it the sensible observation of Manzoni, that one book at a time is enough, when it is not more than enough. He who opens a historical book in order there to learn the particulars of an event, or a book on economics in order to learn how an economic institution works, should not be obliged to read the theory of historical events and disquisitions on the place of Economics in the system of the sciences. "*Il s'agit d'un*

chapon et non point d'Aristote," as the judge in the *Plaideurs* said to the advocate who went back in his speech to the *Politics* of Aristotle. But, besides the literary contamination, there is also here the other inconvenience, that science and the theory of the sciences being different operations and demanding different aptitudes and preparations, the specialist who is competent in the first is usually not at all competent in the second; though he may be believed to be so, owing to a confusion of names. Why, indeed, should an expert on banking and Stock Exchange business be versed in the gnoseology of economic science? The affirmation of competence in the one on the strength of competence in the other constitutes a true and proper sophism *a dicto simpliciter ad dictum secundum quid.*

The capricious multiplication of the sciences.

Further, the specialist has his pride, which leads him to exaggerate what he practises and fail to recognize its true nature and limits. The multiplication of the *Sciences* in our days has no other origin than this; the philosopher contemplates it with astonishment; it is a truly miraculous multiplication of the seven loaves of bread and five small fishes. A *new science* is announced, whenever a crude idea passes through the brain of a professor. We are made glad

with *Sociologies*, *social Psychologies*, *Ethno-psychologies*, *Anthropogeographies*, *Criminologies*, *comparative Literatures*, and so on. Some years ago, an eminent German historian, having observed that some use might be made of genealogical and heraldic studies, generally abandoned to the cultivators and purveyors of the mania for birth and titles, instead of limiting himself to publishing his little collection of minute observations at once proclaimed Genealogy as a science, *Genealogie als Wissenschaft*, and provided the appropriate manual. This begins by determining the *concept* of Genealogy, and proceeds to study its relations with history, with the natural sciences, with zoology, with physiology, with psychology and psychiatry, and with the knowable universe.

The sciences and academic prejudices.

Finally, the specialist is generally a teacher, and therefore accustomed to identify eternal ideal science with his real and contingent chair, and the organism of knowledge with that of the university faculties. Hence arises a fashion of conceiving the nature and scope of the sciences that has become habitual in the academic world. It consists of *personifying* science, and telling this imaginary person what he has to do, without regard to whether the assignment of the task

accords or no with the quality of the function. "Logic will be occupied with this, but yet will not neglect this other thing; it will benefit by casting a look on this third thing also, which is extraneous to its task, but not to its interest; nor will it fail to aid, with due regard, the student of an analogous matter, by giving to him suggestions, if not even rules." Whoever reads the scientific books of our times will recognize in this example, not a caricature, but a plan constantly repeated and applied. It was said of the poet Aleardo Aleardi that he treated the Muse like his maid-servant, since he was at every instant addressing himself to her and asking her something. The professor ends by treating Science like his steward, or at least his respectable consort, with whom he naïvely comes to an agreement regarding the portions that are to form the meals of the day, and other matters concerning the management of the family.

THIRD PART

THE FORMS OF ERRORS AND THE SEARCH FOR TRUTH

I

ERROR AND ITS NECESSARY FORMS

Error as negativity, and impossibility of treating specially of errors.

ERROR has sometimes been called privation or *negativity*. It is commonly defined as a thinking of the false, as the non-conformity of thought with its object, and in other similar ways. These are all reducible to the first, since, for example, thought which is of a different form from its object is false thought, which does not attain to its intrinsic end; and false thought is not thought, but privation of thought, negativity.

As negativity error gives rise to a negative concept, responding to the positive concept, which is truth. True and false, truth and error, are related to one another as opposite concepts. Now we know from the logical doctrines just stated that opposite concepts, far from being separable, are not even distinguishable, and when they are distinguished, they represent nothing but the abstract division of the pure concept, of the unique concept, which is the

synthesis or dialectic of opposites. And we know from the whole of Philosophy that Reality, thought in the pure concept and of which the pure concept is also an integral element, genuine and truly real Reality, is a perpetual development and progress, which is rendered possible by the negative term intrinsic to the positive and constituting the mainspring of its development.

If then, error is negativity, it is vain to treat it as something positive. No other positivity or reality belongs to it than just negativity, which is a moment of the dialectic synthesis and outside the synthesis is nothing. A treatment of error in this sense already exists quite complete in the treatment of logical truth; and there is nothing special to add here to that argument. As a fact, a form of the spirit distinguishable from the positive and real forms, error does not exist, and philosophy cannot philosophize upon what is not.

Positive and existing errors.

Nevertheless, we all know errors, distinguishable from truth and existing for themselves. The evolutionist affirms the biological formation of the *a priori*; the utilitarian resolves duty into individual interest; the Christian says that God the Father sent his son Jesus to redeem men from the perdition into which they had fallen through the sin of Adam; the Buddhist preaches

the annulment of the Will. Are not these true and proper errors? Have they perchance no existence? Have they not been expressed, repeated, listened to, believed? Whoever does not admit the validity of the examples adduced can himself find others; there will certainly be no lack of examples in such a field. Do we wish to maintain that these errors do not exist, in homage to the definition of error as negativity and unreality? They may not exist as truth, but they may perfectly well exist as errors.

Positive errors as practical acts.

There is no way of escaping from this antithesis between the inconceivability of the existence of error and the impossibility of denying the existence of errors which the mind recognizes and the fact proves, save by the solution to which we have several times had occasion to refer. That error, which has existence, is not error and negativity, but something positive, a product of the spirit. And since that product of the spirit is without truth, it cannot be the work of the theoretic spirit. And since beyond the theoretic spirit there is nothing but the practical spirit, error, which we meet with as something existing, must of necessity be a product of the practical spirit. If every way of issue is closed, this one is open; it goes

to the very bottom and leads to the place of rest.

Indeed, he who produces an error has no power to twist or to denaturalize or stain the truth, which is his thought itself, the thought which acts in him and in all men; indeed, no sooner has he touched thought than he is touched by it: he thinks and does not err. He possesses only the practical power of passing from thought to *deed*; and his doing, in fact his thinking, is to open his mouth and emit sounds to which there corresponds no thought, or, what is the same thing, no thought which has value, precision, coherence and truth. It is to smear a canvas to which no intuition corresponds; to rhyme a sonnet, combining the phrases of others, which simulate the genius that is absent. Theoretical error, when it is truly so, is inseparable from the life of thought, which to the extent to which it perpetually overcomes that negative moment, is always born anew. When it is possible to separate and consider it in itself, what is before us is not theoretical error, but practical act.

Practical acts not practical errors.

Practical act and not practical error, or Evil; for that practical act is altogether rational. Let him who doubts this cast a glance at those who produce errors. He will be at once convinced

that they act with perfect rationality. The dauber produces an object which is asked for in the market by people who wish to have at home pictures of any sort, to cover the walls and to attest to their own easy circumstances or riches, and who are altogether indifferent to the æsthetic significance of those objects. The rhymer wishes to secure an easy success for himself among people who look upon a sonnet as a social amusement. The babbler who emits sounds instead of thoughts, often obtains in virtue of those sounds applause and honour denied to the serious thinker: *un sot trouve toujours un plus sot pour l'admirer.* If, by means of those so-called errors, provision is made for house, firing, food, children's clothes, or for the satisfaction of self-esteem, ambitions and caprices, who will say that they are irrational acts? Man does not live by bread alone, but he does live by bread; and if, by means of those acts, bread is provided, that is to say, if the wants of each one's individuality are met, they are well-directed, far-sighted, fruitful, and therefore most rational.

Economically practical, not morally practical.

This does not, on the other hand, mean that they are moral; they are rational, economically rational but not moral. Morality demands that man should think the true. Producers of errors evade, or rather, do not elevate themselves to

that duty. Still intent upon the demands of practical life *qua talis*, they do not actualize in themselves the universal life, nor do they create in obedience to this last the ethical will and the will for truth. Therefore there arises in their souls, and in the souls of those who see them at work, the desire for another superior activity, which should supervene upon the preceding and complete it. They demand, not only to live, but to live well, to seek not only bread, but that "bread of the angels" with which, as the divine poet says, we are never sated. The expression of this desire manifests itself in a cry of discontent, of reprobation, of anguish, of longing; and therefore, with negative emphasis, it accuses of irrationality that inferior rationality which has to be surpassed, and gives the name theoretical error to that which considered in itself must be called a simple economic act.

Doctrine of error, and doctrine of the necessary forms of error.

The doctrine here expounded is developed from what has been said above, or from developments given elsewhere in the Philosophy of the Spirit. We shall not therefore enlarge further upon the immanence of values in facts, upon evil as the stimulus and concreteness of the good, on the non-existence of evil in itself, on the practical character of theoretical error, on

moral responsibility for such error, on the content of desire exhibited by negative statements accompanying judgments of value, and so on. In an exposition of Logic the genesis of the theoretical error could be set aside as presupposed, for in this didactic sphere any one among the common definitions which present error as a thinking of the false is sufficient.

A task in closer connection with Logic is that of enquiring as to the necessary forms of error, the task, that is to say, not of confuting all errors (which is performed by Philosophy as a whole), but of establishing in how many ways the products of the various forms of knowing and of knowledge can be practically combined, and what therefore are the gnoseological possibilities of error. If error is nothing but an *improper combination* of ideas (as Vico said), we must see the number to which the fundamental forms of these improper combinations can be reduced. In traditional Logic, the theory of error appears as the doctrine of *Sophisms* or of sophistical refutations: it has the formalist, verbalist, empirical character common to all that Logic. In our Logic, it must have a philosophic character, that is to say, it must depend upon the already distinguished forms of the theoretic

spirit, and deduce from them the arbitrary combinations of the errors which are formally possible. The ideas or concepts of the theoretic and theoretic-practical spirit are so many and no more, and so many and no more must be the possible improper combinations of them and the forms of theoretic error.

Logical nature of all theoretic errors.

That theoretical error is always at bottom logical error. This is an important proposition, which merits explicit statement, because it is customary to speak of æsthetic, naturalistic, mathematical and historical errors side by side with those that are properly logical or philosophical. We too have spoken and will speak thus, when more subtle distinctions and more precise determinations are not necessary. But in truth, a fact like *humano capiti cervicem equinam jungere*, or *simulare cupressum* in the sea where the shipwrecked struggles in the waves, does not constitute in itself that practical act, called æsthetic error, unless there be added to it the false affirmation that the object produced is an æsthetic object, that is to say, unless there be added a logical affirmation, so that the practical act becomes, by means of it, logical error. Taken in itself, the union of a human head with a horse's neck, or of a cypress with the sea is a

sort of play of the imagination, such as occurs in fancy, in idleness and in dream. The extrinsic combination of a fancy and a concept is also altogether innocent, as in the case of allegory, which, in itself, is not unsuccessful art, but becomes so only when it is affirmed that the two heterogeneous elements form only one; or rather, it then becomes, not unsuccessful art, but bad philosophy. In the same way, a mathematical error (for example, the formula $4 \times 4 = 20$) is nothing but a *flatus vocis*, such as is made in jest or to loosen the tongue. Only when we add the logical affirmation that in this *flatus vocis* an effectual multiplication has been expressed, do we have a mathematical error, which is therefore a logical error. It is not possible to consider and to condemn as a theoretical error a combination which does not intend to deceive any one as to its proper nature; neither those to whom it is shown, nor him who has made it. Thus, among æsthetic, naturalistic, mathematical, historical, logical and practical productions, combinations without cognitive content are quite possible and constantly to be found; but they do not become theoretical errors unless they are crowned with an improper logical affirmation, or rather with an arbitrary judgment formed upon

a logical affirmation. Indeed, even illogical combinations of philosophic concepts are not, as such, logical or theoretical errors, since they can be made tentatively, in order to see whether the two concepts combine or no. To make them errors, the arbitrariness of a special act of judgment is necessary. That arbitrariness consists in a lying to others or to ourselves, in order to satisfy an interest of our merely individual life, and it is impossible to lie without employing an affirmation, which is always a logical product.

History of errors and phenomenology of error.

In this way the problem of determining the various forms of theoretical errors, according to the already distinguished forms of knowledge, becomes transformed and circumscribed in the other problem of determining the various forms of *logical errors*, in relation to the various forms of knowledge, that is to say, of determining the necessary forms of philosophic errors. Certainly, every individual errs in his own way, according to the conditions in which he finds himself; just as every individual according to those conditions discovers truth in his own way. But Philosophy in the strict sense (in the form of a philosophical treatise) cannot complete the examination of all individual errors. This is the task of all philosophies as they are developed in the ages and

of the thought of all thinking beings, who have been, are, and will be. *Its* task is to illuminate the eternal ideal history of errors, which is the eternal ideal history of truth, in its relations with the eternal forms of the practical spirit. The Philosophy of the spirit, as a treatise of philosophy, cannot give the history of errors; but must limit itself to giving their *phenomenology*. In this sense is to be understood the enquiry concerning the fundamental forms of philosophical errors. These forms may be briefly deduced as follows.

Deduction of the forms of logical errors. Forms deduced from the concept of the concept, and forms deduced from the other concepts.

The pure concept, which is philosophy, can be incorrectly combined and mistaken either for the form that precedes it, pure representation (art), or for that which follows it, the empirical and abstract concept (natural and mathematical sciences); or it can be wrongly divided in its unity of concept and representation (*a priori* synthesis), and wrongly again combined—either the concept may be taken as representation, or the representation as concept. Hence arise the fundamental forms of errors which it will be useful to denominate as *æstheticism*, *empiricism*, *mathematicism*, *philosophism*, and *historicism* (or *mythologism*). On the other hand, the other distinctions of the concept, or distinct concepts, can be

incorrectly combined among themselves in a series of false combinations, corresponding to the series of the other particular philosophic sciences, and hence arise the forms of the other philosophic errors. But in Logic it is sufficient to show the possibility of these last forms of errors, and to adduce certain cases as examples, because a complete determination of them would demand that complete exposition of the whole philosophic system, which cannot be furnished in a treatise on Logic.

Errors arising from errors.

Finally, since it is impossible that any form whatever of these errors, whether specifically logical or generically philosophic, should satisfy the mind, which asks for the true and does not lend itself to deception or mockery, each one of these forms tends to convert itself into the other, owing to its arbitrariety and untenability, and all mutually destroy one another. When the attempt is made to preserve both the true form and the insufficient form, or all the insufficient forms, we have gnoseological dualism ; but with the decline to complete destruction, we have the error of *scepticism* and of *agnosticism.* Finally, if, having been by these led back to life and being deprived of every concept that should illuminate it back to life as a mystery, we affirm that truth lies in that theoretic

mystery, in living life without thought, we have the error of *mysticism*. Dualism, scepticism (or agnosticism) and mysticism thus extend both to strictly logical problems (that is to say, to the possibility, in general, of knowing reality), and to all other philosophic problems. Hence we can speak of a practical dualism, of an æsthetic or ethical scepticism, and of an æsthetic or ethical mysticism.

Professionalism and nationality of errors.

Such, stated in a summary manner, is the deduction of philosophic errors, which we shall now proceed to examine in detail. Upon their forms, which represent so many tendencies of the human spirit, is based this other fact, which is constantly striking us, and which may be called the *professionalism* of errors. Every one is disposed to use in other fields of activity those instruments that are familiar to him in the field which he knows best. The poet by vocation and profession dreams and imagines, even when he should reason; the philosopher reasons even when he should be poetical; the historian seeks authority, even when he should seek the necessity of the human mind; the practical man asks himself of what use a thing is, even when he should ask himself what a thing is; the naturalist constructs classes, even when he should break

through them, in order to think real things; the mathematician persists in writing formulæ, even when there is nothing to calculate. If the narrowness of the *Esprits mathématiques* nas been denounced, it must not be believed that the other professions have not also got their narrownesses. The philosopher's profession is no exception to this, for he should surpass all one-sided views, but does not always succeed. It is one thing to say and another to do, and if a man forewarned is half saved, he is not therefore altogether saved. That professionalism of error, which we observe in individuals, is also to be observed on a large scale among peoples. Thus we speak of peoples as antiartistic, antiphilosophical, or antimathematical: of speculative Germany, of intellectualist and abstract France, of empiricist England, of Italy as artistic in the centre and the north, and as philosophic in the south. But peoples, like individuals, are changeable and can be educated: so much so that in our days, the traditional Anglo-Saxon empiricism begins little by little to lose ground before the speculative education of the English people, due to classical German thought; France that was abstractionist becomes intuitionist and mystic. Germany leaves the vast dominion of the skies assigned to her by

Heine for that of industry and commerce, and philosophizes somewhat unworthily; Italy, which in greater part was a country of artists, poets and politicians, is traversed in every direction by religious and philosophic currents. Were it not for this capacity for education of individuals and peoples, History would not be a free development, but determinism and mechanism, and each of us would possess less of that courage for social activity which each one exhibits with great ardour according to his own convictions.

II

ÆSTHETICISM, EMPIRICISM AND MATHEMATICISM

Definition of these forms.

ÆSTHETICISM is the philosophic error which consists in substituting the form of intuition for the form of the concept, and of attributing to the former the office and value of the latter. Empiricism is the analogous substitution of the empirical concept, by means of which philosophic function and value is attributed to the empirical and natural sciences. Finally, mathematicism is the presentation of the abstract concept as concrete concept and of mathematics as philosophy.

Æstheticism.

We have met with æstheticism and with empiricism at the beginning of our exposition, and again here and there throughout its course; and we have sufficiently determined the nature of both and demonstrated the contradictions in which they become involved. In every one of their movements they presuppose the pure concept and the philosophy of which they mean to take the place. At the same time, they do not develop

the philosophy which they have presupposed, because they suffocate it in the vapour of the intuitions and in the chilly waters of naturalistic concepts. They are not therefore effective thought, but an adulteration of thought with heterogeneous elements, which by a misuse of words are said to be furnished with theoretic and logical value.

Æstheticism has few representatives, because complete abstention from reflection and reason is too obviously contradictory. Even when art was considered to be a true *instrument* of philosophy, in the Romantic period, this affirmation was put forward in a confused manner, intuition being finally distinguished from intuition, art from art. This amounted at bottom to a radical change and an abandonment of the original thesis. We have seen æstheticism reappear in our times under the name of *intuitionism*, or again as *pure experience*: an experience which is taken to be not posterior, but anterior to every intellectual category, and should therefore be called nothing but pure intuition.

Empiricism.

The representatives of empiricism are on the other hand most numerous, now as in the past; so much so that empiricism sometimes seems to be the sole adversary of philosophy, and the

true origin of all philosophic errors. This opinion is without doubt inexact, but it finds support in the fact that philosophy is obliged to defend itself from the incessant assaults of empiricism, more than from any other enemy. The confusion between pure and empirical concepts is, indeed, easy, since both have the form of universality (though the universality of the second is falsely assumed) and both refer to the concept (though in the second the concept is something arbitrarily limited). The empiricist is like the philosopher, in so far as he immerses himself in facts and constructs concepts.

Positivism, philosophy founded upon the sciences, inductive metaphysic.

The last great historical manifestation of empiricism is that which, from the system of Auguste Comte, took the name of *positivism* and by its very name expressed the intention of basing itself upon facts (that is, upon facts historically certified), in order to classify them, thus reducing philosophy to a classification. This, like all classifications, proceeded from the poorest to the richest, from the abstract gradually to the less abstract, though never to the concrete. Positivism did not seem to be aware that the facts from which it proposed to proceed and which it believed to be the rough material of experience, were already *philosophic determinations*, and could

only in this way be admitted as *historically ascertained.* *Psychologism* is also positivism; positivism, that is to say, more properly applied to the group of the so-called mental and moral sciences. *Neocriticism* can be almost altogether identified with positivism, although its upholders generally possess some knowledge of philosophical history (which is altogether lacking to the pure positivists), and this confers a more specious polish on their doctrine. Neocriticism, indeed, tends to eliminate every speculative element from the Kantian criticism, and by so doing approaches positivism so as almost to become confounded with it. It is no wonder, therefore, that from the camp of the neocritics should have originated the proclamation and programme of *a philosophy founded upon the sciences*, or of an *inductive metaphysic.* This is simply and solely the reduction of philosophy to the sciences, because a scientific philosophy, an inductive metaphysic, is not speculation, but classification, or as those who advocate it ingenuously declare, a systematization of the results obtained by the sciences. Here too are kindled the most comical quarrels between scientists and philosophers. For when it is only a question of classifying and systematizing those results, the scientist rightly

feels that he can dispense with the labours of the philosopher, indeed, he feels that he alone, who has obtained the results, knows what these exactly are and how they should be treated in order to avoid deformation. And the philosopher, who by making himself an empiricist, a positivist, a psychologist and a neocritic, has renounced his autonomy, approaches the scientists and offers with little dignity services that they refuse. He elaborates scientific expositions, which they call compilations and mistakes, he proposes additions or corrections at which they mock as superfluous or foolish. Nevertheless, the philosopher does not grow weary nor become offended at these repulses and jests; he returns to the charge and indeed it is only when someone wishes to redeem him from this voluntary servitude and abjection that he turns upon him with fury, saying that philosophy should live on *familiar terms* with the sciences. As if the relations that we have faithfully described were relations of reciprocal respect and harmony! The truth is that the majority of empirical philosophers are failures in science and unsuccessful in philosophy, who out of their double incompetence compound a logical theory, thus furnishing another proof (if further proof were needed) in confirmation of the

practical origin of errors. For our part, we recognise the justice of the accusation of parasitism, which is brought against a philosophy of this character, and we will willingly afford our aid to the scientists in driving out these intruders, who dishonour philosophy in our eyes not less than in theirs they dishonour the sciences.

Empiricism and facts.

Empiricism owes the greater part of its influence upon the minds of many to its continual appeal to reality and facts. This leads to the belief that speculative philosophy wishes to neglect reality and facts and to build, as the saying is, upon clouds. But we have here an ambiguity and a sophism with which we must not allow ourselves to be deceived. Not only does speculative philosophy also base itself upon facts and have the phenomenal world as its point of departure; but speculative philosophy truly founds itself upon facts and empiricism does not. The first considers facts in their infinite variety and in their continuous development; the second, a certain number of facts, collected at certain epochs and among certain peoples, or at all epochs and among all peoples empirically known; that is to say, it considers a limited number of facts. Speculative philosophy, presupposing the pure phenomenon, transforms it into (historical)

fact and is a true *philosophy of fact*; empiricism, without being aware of it, presupposes the facts that it accepts, which are already, though with little criticism, historically ascertained and interpreted. This unconsciousness of what it is doing makes its condition worse, so that it can give nothing but *a philosophy of classifications*, which are taken for facts only through habitual lack of reflection. Speculative philosophy, therefore, can answer the claim and the boast of empiricism that it is based upon facts, by accepting the claim but denying the boast, as one to which empiricism has and can have no right, and by appropriating this achievement to itself.

Bankruptcy of empiricism: dualism, agnosticism, spiritualism and superstition.

But the bankruptcy of empiricism in all its forms and under all its synonyms is clear in the dualism to which it leads, of appearance and essence, phenomenon and noumenon. For while it professes that there is nothing knowable but the phenomenon, it also postulates an essence, a noumenon, something that is beyond the phenomenon and unknowable. It is all very well to say that this unknowable is not, for it, a proper object for science and philosophy, but it is not to be driven from the field of reality merely by removing it from science and philosophy. Every empiricism, then, recognises side by side

with the rights of thought, the rights of *feeling*, and thus the circle of reality comes to be broken at one or more points. When it is wished to continue working empirically upon the unknowable residue, we have those various attempts, which can all of them be summarized beneath the name of *spiritualism*. Here the hidden truth is sought by means of experiments of a naturalistic type and spirit is reduced to matter more or less light and subtle. Empiricism ends in superstition. This has always happened; in the decadence of ancient civilization, when philosophers took to converting themselves into thaumaturges; at the eve of the French Revolution, after a century of empiricism and sensationalism, when all sorts of fanatics and schemers appeared and were the favourites of a society of most credulous materialists; in our times, when they have been favoured by a less credulous public of positivists, or of ex-positivists.

Evolutionist positivism and rationalist positivism.

Empiricism has certainly sought to cure its own insufficiencies, of which it was more or less conscious, and *evolutionist positivism* must be numbered among these attempts. This form proposed to correct the antihistorical character of positivism by providing a *history* of reality. But this history was always based upon em-

pirical presuppositions, and was therefore a history of classifications, not of concrete reality; an extravagant caricature of the philosophy of becoming, from whose breast comes History rightly and truly so-called. Another attempt was that of *rationalist positivism*, which sought to check the degeneration of positivism toward dualism, sentimentalism and superstition, by appealing to the absolute rights of reason. But this reason is nevertheless always empirical reason, limited to certain series of facts, extrinsic, classificatory, unintelligent. Absolute authority can well be attributed to it in words, but such an attribution does not confer the power of exercising it. This kind of positivism, therefore, meets in our day with favour in freemasonry (at least of the Franco-Italian sort). This is a sect, which is annoying, chiefly because, heedless of facts, it preserves and defends the habit of making use of empty formulas and phrases, and because when it has insulted some priestly vestment, it believes that it has successfully destroyed superstition and obscurantism in man, or when it has declaimed about liberty, it imagines that by this slight effort, liberty has been won and established. True *reason* abhors *rationalism*, if it be rationalism of that sort.

Mathematicism is much rarer than empiricism, because the confusion between thinking and calculating is less easy than that between thinking and classifying. Owing to its rarity and paradoxical character, mathematicism has something aristocratic about it, resembling in this the other extreme error, of æstheticism; whereas the intermediate error, empiricism, just because of its mediocrity, is popular and indeed vulgar. *Mathematicism.*

We cannot properly consider as mathematicism that form of philosophy which appeared in antiquity as *Pythagoreanism* and *Neopythagoreanism* and has reappeared in our days as a doctrine of the mathematical relations of the universe and the harmony of the world. In this conception, numbers are not numbers, but symbols; the numerical relations are not arithmetical, but æsthetic. The pretended mathematical philosophers of this type are neither philosophers nor mathematicians, nor are they arbitrary combiners of these two methods. They would be better described as poets or semi-poets. *Symbolical mathematics.*

Nor again can we consider to be mathematicism the attempt made by some philosophers to expound their own ideas by a mathematical, algebraical or geometrical method. If their *Mathematics as demonstrative form of philosophy.*

ideas were ideas and not numbers, the method to which they had recourse necessarily remained extrinsic, and possessed no mathematical character beyond the verbal complacency with which they adopted certain formulæ of definitions, axioms, theorems, lemmas, corollaries and certain numerical symbols. These formulas and symbols could always be replaced by others, without any inconvenience whatever. It is possible to discuss, it has indeed been discussed, whether such modes of exposition are in good or bad literary taste, or of greater or less didactic convenience. They can be condemned, as they have been condemned, and caused to fall into disuse, as they have fallen; but the quality of the philosophic truth thus expressed, remains unaltered and is never changed into mathematics. Neither the system of Spinoza, who employed the geometrical method, nor that of Leibnitz, who desired the universal calculus, are mathematical systems. If they were so, modern philosophy would not owe some of its most important idealist concepts to those two systems.

Errors of mathematicist philosophy.

Better examples of mathematicism than the treatises and systems developed according to its rules are found in the unfulfilled programmes of such treatises and systems, or in the mathe-

maticist treatment of certain philosophic problems. Such, for instance, is that concerning the infinity of the world in space and time, a problem which, treated mathematistically, becomes insoluble and makes many people's heads turn. It is impossible to comprehend the world in one's own mind with the mathematical infinite; and either to give or to refuse to it a beginning and an end. Hence the exclamations of terror before that infinite, and the sense of sublimity which seems to arise in the struggle joined between it, which is indomitable, and the human mind which wishes to dominate it. It has, however, already been observed with reason, that such sublimity is not only very near to the ridiculous, but falls into it with all its weight; and that such terror could not in truth be anything but terror of the *ennui* of having to count and recount in the void and to infinity. The mathematical infinite is nothing real; its appearance of reality is the shadow projected by the mathematical power which the human spirit possesses, of always adding a unit to any number. The true infinite is all before us, in every real fact, and it is only when the continuous unity of reality is divided into separate facts, and space and time are rendered abstract and mathematical, only

then, if the complete operation be forgotten, that the desperate problem arises and the anguish of never being able to solve it. Another and more actual example of this mathematicist mode of treatment is that of the dimensions of space. Here, forgetting that space of three dimensions is nothing real that can be experienced, but is a mathematical construction, and on the other hand finding it convenient for mathematical reasons to construct spaces of less or more than three dimensions, or of *n* dimensions, they end by treating these constructions as conceivable realities, and seriously discuss bi-dimensional beings or four-dimensional worlds.

Dualism, agnosticism and superstition of mathematicism.

With affirmations such as those of infinites incomprehensible to thought, and of real but not experienceable spaces, mathematicism also creates a dualism of thought and of reality superior to thought, or (what amounts to the same thing) of thought which meets its equivalent in experience and thought without a corresponding experience. The unknowable here too lies in wait and falls upon the imprudent mathematicist philosopher, who feels himself lost before a second, third, fourth and infinite worlds, excogitated by himself, superior or inferior worlds to those of man, underworlds and overworlds and

over-overworlds. He then becomes even spiritualist and asks with Zöllner, why spiritualist facts should not possess reality and be produced in the fourth dimension of space, shut off from us. The contradiction of the mathematicist attempt, like that of the æsthetic and empiricist, is clearly revealed in the dualistic, agnostic and mystical consequences to which, as we shall see more clearly further on, all of them necessarily lead.

III

PHILOSOPHISM

Rupture of the unity of the a priori synthesis.

THE three modes of error examined exhaust the possible combinations of the pure concept with the forms of the theoretic or theoretic-practical spirit, anterior or posterior to it. Other modes of error arise from the breaking up of the unity of the concept, from the separation of its constitutive elements. Each one of these elements, abstracted from the other, and finding that other before it, annuls, instead of recognizing the other as an organic part of itself; that is to say, substitutes for it its own abstract existence.

The concept, as we know, is the logical *a priori* synthesis, and so the unity of subject and predicate, unity in distinction and distinction in unity, affirmation of the concept and judgment of the fact, at once philosophy and history. In pure and effective thought, the two elements constitute an indissoluble organism. A fact cannot be affirmed without thinking; it is im-

possible to think without affirming a fact. In logical thought, the representation without the concept is blind, it is pure representation deprived of logical right, it is not the subject of a judgment; the concept without representation is void.

Philosophism, logicism or panlogism.

This unity can be severed, practically, in the act which is called error, where propositions expressing the truth are combined, not according to their theoretical connection, but according to what is deemed useful by him who makes the combination. It then happens that in the first place we have an empty concept, which, being without any internal rule (owing to this very vacuity), fills itself with a content which does not belong to it—for this it could have only from contact with the representation—and gives itself a *false* subject. The opposite also occurs, that is to say, a false predicate or concept is posited, a case which will be considered further on. Limiting ourselves, meanwhile, to the first and observing that it consists in the abuse of the logical element, we shall be able to call that mode of error *logicism* or *panlogism*, or also *philosophism* (since the abuse of the logical element is identical with the abuse of the philosophic element).

Philosophy of history.

Logicism, panlogism or philosophism, is the usurpation that philosophy in the narrow sense wreaks upon history, by pretending to deduce history a *priori*, as the process is called. This usurpation is logically impossible owing to the identity of philosophy and history already demonstrated, whence bad history is bad philosophy, and inversely. It may happen that the same individual who at a given moment creates excellent philosophy (and excellent history at the same time) may create bad history (and so bad philosophy) the moment after. But this amounts to saying that he who at one moment has philosophized well, may philosophize badly and err the moment after, and not by any means that the two things are possible in the same act. However, the usurpation, logically impossible, is practically effected, in which case, it is not strictly speaking usurpation, although it comes to be so considered from the logical point of view. On the other hand, the claim for the *a priori* in history is perfectly just; for to affirm a fact means to think it, and it is not possible to think without transforming the representation by means of the concept, and so deducing it from the concept. But this deduction is an *a priori* synthesis and therefore also induction, whereas

the claim to deduce history *a priori* would amount to a deduction without induction, not *History* (which is, for that very reason, *Philosophy*), but a *Philosophy of History.*

The contradictions in this undertaking.

The absurdity of this programme must be clearly set forth, because those who formulate it are wont to concede equivocally that a Philosophy of history must be founded upon actual data, and have induction as its basis. In reality, were those actual data documents to be interpreted, we should not have the Philosophy of history that they desire, but simply History. The actual data, the so-called formless material, in the programme of the Philosophy of history, are at the most already constructed histories, which do not content the philosophers of history. They do not content them, not because they judge them to be false interpretations of the documents (in which case nothing else would be needed but to correct history with history, carrying out the work that all historians do); but because the *very method of history* does not content them, and they demand something else. History is despised as mere narration, and considered not as a form of thought, but as its material, a chaotic mass of representations. The true form of thought is for them the Philosophy of history,

which appears in history and not in documents. And how does it appear? If the documents are removed, the *a priori* synthesis is no longer possible. It arises, then, by the parthenogenesis of the abstract concept, which history finds in itself, without the spark being struck by confrontation with documents. History is deduced *a priori*, not in the concrete but in the void. Whatever be the declarations which philosophers of history add to their programme, its essence cannot be changed. Were these declarations made seriously and all their logical consequences accepted, there would be no reason for maintaining a Philosophy of history beside and beyond history. The two things would become identical, and the programme itself would be annulled, both for those who propose it, and for us who judge it to be contradictory. This is the dilemma, from which there is no escape: either the Philosophy of history is an interpretation of documents, and in this case it is synonymous with History and makes no new claim;—or it does make a new claim and in that case, being no longer interpretation of documents and intending all the same to think facts, it thinks them without documents and draws them from the empty concept, and we have the Philosophy of history, philosophism, panlogism.

In order to give itself body, the Philosophy of history has recourse to analogy. This is a legitimate process of thought, which, in its search for truth, seeks analogies and harmonies. But it is legitimate, as we know, only on condition that the analogy does not remain a merely heuristic hypothesis, but is effectively thinkable and thought. Now the concepts that the Philosophy of history deduces cannot be effectively thought, because they are void; they are neither pure concepts nor pure representations, but an arbitrary mixture of the two forms, and therefore contradiction and vacuity. Thus the analogies of which the Philosophy of history avails itself, are *false analogies*, that is to say, *metaphors* and *comparisons*, transformed into analogies and concepts. It will declare, for instance, that the Middle Ages are the negation of ancient civilization, and that the modern epoch is the synthesis of these two opposites. But ancient civilization is nothing but an unending series of facts, of which each is a synthesis of opposites, real only in so far as it is a synthesis of opposites. And between ancient civilization and the Middle Ages, there is absolute continuity, not less than between the Middle Ages and the modern epoch. Facts cannot stand to one another as opposite

Philosophy of history and false analogies.

concepts, because they cannot be opposed to one another as positive and negative. The fact that is called positive is positive-negative and so, in like manner, is that which is called negative. It will further declare (always by way of example) that Greece was thought and Rome action, and the modern world is the unity of thought and action. But in reality, Greek life was thought and action, like that of Rome, and like modern life. Every epoch, every people, every individual, every instant of life is thought and action, in virtue of the unity of the spirit, whose distinctions are never broken up into separate existences. The affirmations that belong to the Philosophy of history are all of this kind, and when they are not of this kind, it means that they do not belong to the essence of the Philosophy of history.

Distinction between the Philosophy of history, and the books thus entitled. Philosophical and historical merits of these.

The last-mentioned case occurs frequently in books that bear the title of Philosophy of history. These certainly cannot be considered to have been refuted when the concept of that science has been refuted. Science is one thing and the book another. The error of a false attempt at science is one thing and the value of books, which usually (especially with great thinkers and writers) have deeper motives and more valuable parts, is another. Among books upon the

philosophy of history are numbered some masterpieces of human genius, — fountains of truth, at which many generations have quenched their thirst and to which men return perpetually. They have often indeed been marvellous books on history, true history, produced by reaction against superficial, partisan or trifling histories. They have for the first time revealed the true character of certain epochs, of certain events, of certain individuals.[1] The sterile form of duality and opposition between Philosophy of history and simple History, concealed the fruitful polemic of a better history against a worse history. Even the formulæ, which were falsely regarded as deductions of concepts (for example, that the Middle Ages are the negation of antiquity and the Renaissance the negation of the Middle Ages, or that the Germanic spirit, from the Reformation to the Romantic movement, is the affirmation of inward liberty, or that Italy of the fifteenth century represents Art, France the State, and so on), were at bottom vivacious expressions of predominant characteristics, by means of which the various epochs and events were portrayed. These expressions and truths

[1] See my *Essay on Hegel*, chap. ix. (*What is living, etc., of Hegel*, tr. D. Ainslie).

could be accepted without there being any necessity for presupposing clear and fixed oppositions and distinctions, or for denying the extra-temporality of spiritual forms. Besides these historical characteristics, discoveries more strictly philosophical appeared for the first time in those books; hence not only do we find in them the first outlines of a Logic of historical science (a Logic of the individual judgment), but also, sometimes in imaginative forms, determinations of eternal aspects of the Spirit, which had previously been unknown or ill-known. Such is the case with the concept of *progress* and *providence*, and of that other concept concerning the spiritual autonomy of *language* and of *art*, which presented itself for the first time as the discovery of the historical epoch, in which man, wholly sense and imagination, without intelligible genera and concepts, is supposed to have spoken and poetized without reasoning. In an equally imaginary fashion the constancy of the spirit, which eternally repeats itself, also found in those philosophies the formula of the perpetual *passing* away and returning of the various epochs of civilization. These philosophical truths, like the historical characteristics, must be purged, the first from the representations improperly united with them, the

second from the logical character which they wrongly assumed. But they cannot be discarded, unless we are willing to throw away the gold, through our unwillingness to have the trouble of separating it from the dross. And this necessity for purification further confirms the error of the philosophism, since it is the purification of Philosophy and of History from the Philosophy of History.

Philosophy of nature.

Another manifestation of the philosophism, somewhat different from the preceding, is the science which assumes the name of *Philosophy* of *nature*. Here it is claimed to deduce, not the historical facts themselves, but the general concepts, which constitute the natural sciences. The philosophy of nature can be considered as the converse error to the empiricist error, which claims to induce philosophic categories *a posteriori*, whereas this claims to deduce empirical concepts *a priori*.

Its substantial identity with the Philosophy of history.

But the theoretic content of empirical concepts and of the natural sciences is, as we know, nothing but perception and history. So that, in the final analysis, the Philosophy of nature can be reduced to the Philosophy of history (extended to so-called inferior or subhuman reality), making, like the other, the vain attempt to produce in the

void what thought can produce only in the concrete, that is to say, by synthesizing. And that it tends to become a Philosophy of history is also to be seen from its not infrequent hesitances before abstract concepts, or mathematical science, sometimes declaring that the pure abstractions of the intellect must remain such and are not otherwise deducible and capable of being philosophized about. The Philosophy of nature has usually been extended to the field of the physical and natural sciences, including also some parts of mechanics. But it has refused to undertake the deduction of the theorems of geometry and still more the operations of the Calculus.

The contradictions of the Philosophy of nature.

The Philosophy of nature, like the Philosophy of history, has abounded in declarations of the necessity of the historical and empirical method. It has recognized that the physical and natural sciences are its antecedent and presupposition and that it continues and completes their work. But it is not permitted to complete this work because this work extends to infinity. And it would not be able to continue it, save by turning itself into physics and natural sciences, working as these do in laboratories, observing, classifying, and making laws (legislating). Now the Philosophy of nature does not wish to adopt such a

procedure, but to introduce a new method into the study of nature. And since a new method and a new science are the same thing, it does not wish to be a continuation of physics and of the natural sciences, but a new science. And since a new science implies a new object, it wishes to give a new object, which is precisely the *philosophic idea of nature.* This philosophic idea of nature would therefore be constructed by a method which would not and could not have anything in common with that of the empirical sciences. Yet the Philosophy of nature is not able to dispense with the empirical concepts, which it strives to deduce *a priori.* And here lies the contradictoriness of its undertaking. The dilemma which confronted the Philosophy of history must be repeated in this case also :—either it has to continue the work of the physical and natural sciences, and in this case there will be progress in the physical and natural sciences and not in the Philosophy of nature; or it has to construct the Philosophy of nature (the physical and natural sciences); and this cannot be done, save by an *a priori* deduction of the empirical and thus falling into the error of panlogism or philosophism.

The Philosophy of nature, like that of history,

False analogies in the Philosophy of nature.

expresses itself in false analogies. It will say, for instance, that the poles of the magnet are the opposed moments of the concept, made extrinsic and appearing in space; or that light is the ideality of nature; or that magnetism corresponds to length, electricity to breadth and gravity to volume; or again (like more ancient philosophers), that water, or fire, or sulphur, or mercury, is the essence of all natural facts. But these phenomena which are given as essences, those classes of natural facts which are given as moments of the concept and of the spirit, are no longer either scientific phenomena, or the concepts and spiritual forms of philosophy. The first are intuitions and not categories; the second categories and not intuitions; and just because they are so clearly distinguished from one another they mutually mingle in the *a priori* synthesis. On the other hand, the concepts of the Philosophy of nature are categories, which as such present themselves in their emptiness as intuitions, and intuitions, which in their blindness present themselves as categories. These thoughts are contradictory. They can be *spoken*, or rather *uttered*, because it is possible to combine phonetically contradictory propositions, but it is impossible to think them. Such combinations by their ingenuity often give

rise to surprise or astonishment. But mental satisfaction is never obtained from them merely because the mind is excited and deluded. On the other hand, the Philosophy of nature, in this labour of ingenuity, runs against limits, which even ingenuity cannot overcome. Then are heard affirmations, which amount to open confessions of the impossibility of the task. Of this sort is the assertion that nature contains the contingent and the irrational and therefore is incapable of complete rationalization; or that nature in its self-externality is impotent to achieve the concept and the spirit. In like manner, Philosophies of history end by confessing that there are facts which are told and are not deduced, because they are small, contingent and fortuitous matter for chronicle. Thus, after having announced in the programme the rationality of nature and of history, they recognize in the execution of the programme that the contrary is true. They simply deny the rationality of the world, because they cannot bring themselves to deny the rationality of the pseudo-sciences of philosophism.

Works entitled Philosophy of nature.

Finally, the reservations made in the case of works dealing with the Philosophy of history are to be repeated for those dealing with the

Philosophy of nature. In them, too, there is something more than, and something different from, the sterile analogical exercises that we have mentioned. Some of the philosophers of nature, in the pursuit of their illusions, have made occasional scientific discoveries, in the same way that the alchemists seeking the philosopher's stone made discoveries in Chemistry. Those discoveries in physical and natural science cannot serve to increase the value of the theory of the Philosophy of nature any more than those made in chemistry increased the value of alchemy. But they confer value on the books entitled Philosophy of nature, and do honour to their authors as physicists, not as metaphysicians. From the philosophical point of view, those works have had the merit of affirming, though but in imaginative and symbolical ways, the unity and spirituality of nature, opening the path to its unification with the history of man. They have the yet greater merit of contributing effectively in the battle engaged by them against the sciences of making clear the empirical character of the naturalistic concepts and the abstract character of the mathematical. Nevertheless, they drew illegitimate conclusions from such gnoseological truth and carried on a war of

conquest, which must be held to be unjust. In virtue of the positive elements that they contain, works on the Philosophy of nature have aided the advance both of the sciences and of philosophy, which in their properly philosophico-naturalistic parts they have violated and debased and forced into hybrid unions.

Contemporary demands for a Philosophy of nature and their various meanings.

In our day demands for a Philosophy of history are rare and received with scant favour; but it seems that those for a Philosophy of nature are again acquiring vigour. On seeking the inward meaning of this fact, it is seen that on the one hand many of those who demand a Philosophy of nature are empiricists, desirous of a natural science elaborated into a philosophy, and therefore not properly of a Philosophy of nature, but of a view of the natural sciences that may supplant philosophy. Other upholders of a Philosophy of nature echo the only programme of such a philosophy, as it was formulated especially by Schelling and by Hegel, but declare themselves altogether dissatisfied with the attempts to carry it out made by Schelling, by Hegel and by the followers of both. They are dissatisfied, but incapable of setting their dissatisfaction at rest by a new attempt at carrying out the programme. They are also without the intellectual courage

necessary to question and to re-examine the solidity of the programme itself, which is in their judgment plausible and guaranteed by such great names. For what indeed is more plausible upon first inspection than the affirmation that the empirical sciences must be elevated to the rank of philosophy? It seems that too much mental liberty is needed to understand and to distinguish from the preceding, the somewhat different proposition that empiricism (empirical philosophy) must certainly be elevated to the rank of non-empirical philosophy, but that the *empirical sciences* must be left in peace to their own methods, without any attempt to render perfect by means of extrinsic additions that which has in itself all the perfection of which it is capable. It seems that more intelligence than is usually met with is necessary in order to recognize that this last proposition does not establish a *dualism* of spirit and nature, of philosophy and the natural sciences, but for ever destroys every dualism by making of the natural sciences a merely practical formation of the spirit, which has no voice in the assembly of the philosophical sciences, as the object which it has created has no reality. An ultimate tendency can be discerned in the complex movement of the day toward a Philosophy of nature. This is

the attainment of the consciousness that reality is on this side of the classifications of the natural sciences, and that the natural sciences must be retranslated into *history*, by means of a historical consideration (concrete and not abstract) of the facts that are called natural. But this tendency is not something that will attain its end in a near or in a distant future. It has always shown its value and shows it also to-day; it can be recommended and promoted, but neither more nor less than every other legitimate form of spiritual activity can be recommended and promoted. Classifications are classifications; and what man really seeks out, what continually enriches the empirical sciences, is always the history of nature, —the series of facts, which, as we know, can be distinguished only in an empirical manner from the history of man, and which along with this constitutes *History* without genitive or adjective; history, which cannot even be strictly called history of the spirit, for the Spirit is, itself, History.

IV

MYTHOLOGISM

Rupture of the unity of the synthesis a priori. Mythologism.

WHEN by the severance of subject from predicate, of history from philosophy, the mutilated subject is given as predicate, mutilated history as philosophy, and consequently a false predicate is posited, which predicate is an abstract subject and therefore mere representation; when this happens, there occurs the opposite error to that which we have just particularly examined. That was called philosophism; this might be called historicism; but since this last term has usually been employed to indicate a form of positivism, it will be more convenient to call it *mythologism.*

The process of this error (somewhat abstruse in the way that we have stated it) becomes clear at once in virtue of the name that has been assigned to it. Every one has examples of myths present in his memory. Let us take the myths of Uranus and Gæa, of the seven days of creation, of the earthly Paradise, and of Prometheus,

of Danae, or of Niobe. Every one is ready to say of a scientific theory which introduces causes not demonstrable either in the experience or in thought, that it is not theory, but mythology, not concept, but myth.

Essence of the myth.

What then is it that is called myth? It is certainly not a simple poetic and artistic fancy. The myth contains an affirmation or logical judgment, and precisely for this reason may be considered a hybrid affirmation, half fanciful and erroneous. If it has been confused with art, it is not so much a false doctrine of the myth that should be blamed, as a false æsthetic doctrine, which we have already refuted, and which fails to recognize the original and ingenuous character of art. On the other hand, the logical affirmation does not stand to the myth as something extrinsic, as in the case of a fable or image put forward to express a given concept, where the difference of the two terms and the arbitrariness of the relation between them declares itself more or less openly. In this case there is not myth, but *allegory*. In myth, on the contrary, the concept is not separated from the representation, indeed it is throughout penetrated by it. Yet the compenetration is not effected in a logical manner, as in the singular judgment and in the *a priori*

synthesis. The compenetration is obtained capriciously, yet it gives itself out as necessary and logical. For instance, it is desired to explain how sky and earth were formed, how sea and rivers, plants and animals, men and language arose; and behold, we are given as explanations, the stories of the marriage of Uranus and Gæa, and the birth of Chronos and of the other Titans; or the story of a God Creator, who successively drew all things out of chaos in seven days, and made man of clay and taught him the names of things. It is desired to explain the origin of human civilization, and the tale is told of Prometheus, who steals fire and instructs men in the arts; or of Adam and Eve, who eat the forbidden fruit, and driven from the earthly Paradise are forced to till the ground and bathe it with their sweat. It is desired to explain the astronomical phenomena of dawn or of winter, and the story is told of Phœbus, who pursues Daphne, or of the same god who slays one after the other the sons of Niobe. These naturalistic interpretations may pass as examples, however contested and antiquated they may be. In place of the concepts which should illuminate single facts, we are given representations. Hence are derived what we have called false predicates.

Philosophy becomes a little anecdote, a novelette, a story; history too becomes a story and ceases to be history, because it lacks the logical element necessary for its constitution. The true philosophic doctrine in the preceding cases, for example, will be that of an immanent spirit, of which stars and sky, earth and sea, plants and animals, constitute the contingent manifestations; the doctrine which looks upon the consciousness of good and evil and the necessity for work, not as the result of a theft made from the gods or of a violation of one of their commands, but as eternal categories of reality; and which regards language, not as the teaching of men by a god, but as an essential determination of humanity, or indeed of spirituality, which is not truly, if it does not express itself. They will also, if we like, be the philosophic doctrines of materialism and of evolutionism; but these, in order to be accepted as philosophic, must prove, like the preceding, that they do not substitute representations for concepts and are strictly founded upon thought and employ its method, that is to say, that they are philosophy and not mythology. For this reason, in philosophical criticism, adverse philosophies often accuse one another of being more or less mythological, and we hear of the

mythology of *atoms*, the mythology of *chance*, the mythology of *ether*, of the *two substances*, of *monads*, of the *blind will*, of the *Unconscious*, or, if you like, of the mythology of the *immanent Spirit*.

Problems concerning the theory of myth.

The particular treatment of all the problems that concern the myth does not belong to this place, where it was important solely to determine the proper nature of that spiritual formation. It is customary, for instance, to distinguish between *myth* and *legend*, attributing the first name to stories of universal content, and the second to stories with an individual and historical content. This partition is analogous to that between philosophy in the strict sense and history, and as such, though it possesses no little practical importance, it is without philosophic value, because, as has been remarked, in myth the universal becomes history and history becomes legend. Nor is it only legend of the past, but it extends even to the future, and thus appear *apocalypses*, the legend of the *Millennium*, and *eschatology*. Again, myths are usually distinguished as *physical* and *ethical*, and this division is in turn analogous to that between the philosophy of the external world and the philosophy of the internal world, the philosophy

of nature and the philosophy of the spirit, and stands or falls with it. So that by this criticism we can solve the disputes as to whether physical myths precede ethical or inversely, whether the origin of myth is or is not anthropomorphic, and the like.

Myth and religion. Identity of the two spiritual formations.

But the myth can assume another name, which makes yet clearer the knowledge of the logical error of which the analysis has been given: the name of *religion*. Mythologism is the *religious error*. Against this thesis various objections have been brought, such as that religion is not theoretical but practical, and has therefore nothing to do with myth; or that it is something *sui generis*, or that it is not exhausted in the myth, since it consists of the complex of all the activities of the human spirit. But against these objections it must above all be maintained that religion is a theoretic fact, since there is no religion *without affirmation*. The practical activity, however noble it may be held, is always an operating, a doing, a producing, and to that extent is mute and alogical. It will be said that that affirmation is *sui generis* and goes beyond the limits of human science. This is most true, if by science we understand the empirical sciences; but it is not true, if by human science

we understand philosophy, since philosophy also goes beyond or is outside the limits of the empirical sciences. It will be said that every religion is founded upon a *revelation*, whereas philosophy does not admit of other revelation than that which the spirit makes to itself as thought. That too is most true; but the revelation of religion, in so far as it is not that of the spirit as thought, expresses precisely the logical contradiction of mythologism: the affirmation of the universal as mere representation, and this asserted as a universal truth on the strength of a contingent fact, a communication which ought to be proved and thought, whereas on the contrary it is taken capriciously, as a principle of proof and as equivalent or superior to an act of thought. The theory of religion as a mixture hardly merits refutation, since that complex of the activities of the spirit is a metaphor of the spirit in its totality; that is to say, it gives not a theory of religion, but a new name of the spirit itself,—the object of philosophic speculation.

Religion and philosophy.

Since then, religion is identical with myth, and since myth is not distinguishable from philosophy by any positive character, but only as false philosophy from true philosophy and as error

from the truth which rectifies and contains it, we must affirm that religion, in so far as it is truth, is identical with philosophy, or as can also be said, that *philosophy* is the *true religion*. All ancient and modern thought about religions, which have always been dissolved in philosophies, leads to this result. And since philosophy coincides with history, and religion and the history of religion are the same, and myth and religion are strictly speaking indistinguishable, we can see very well the vanity of the attempt that is being made beneath our eyes to preserve a religion or mythological truth side by side with a history of religions, which on the contrary is supposed to be practised with complete mental freedom and with an entirely critical method. This, which is one of the tendencies of so-called *modernism*, is condemned as contradictory and illogical, by philosophy not less than by the Catholic Church.[1] The history of religions is an integral part of the history of philosophy, and as inseparable from it as error from the history of truth.

When religion does not dissolve into philosophy and wishes to persist together with it, or to substitute itself for philosophy, it reveals itself as

[1] See with reference to this G. Gentile, *Il modernismo e l'enciclica*, *Critica*, vi. pp. 208-229.

Conversion of errors into one another. Conversion of mythologism into philosophism (theology) and of philosophism into mythologism (mythology of nature, historical apocalypses, etc.).

effective error; that is to say, as an arbitrary attempt against truth, due to habit, feelings and individual passions. But the destiny of every form of error is to be unable to persist before the light of truth. Hence the constant change of tactics and the passage of every error into the error from which it had at first wished to dissociate itself, or into which it did not mean to fall. Thus æstheticism, dislodged from its positions, takes refuge in those of empiricism; and empiricism either descends again into pure sensationalism and æstheticism, or becomes volatilized in mysticism. Thus (to stop at the case we have before us) mythologism, which intends to be the opposite of philosophism and to work with blind fancy instead of with empty concepts, is obliged in order to save itself from the attacks of criticism to have recourse to philosophism; and religion is then called *theology*. Theology is philosophism, because it works with concepts which are empty of all historical and empirical content. Myth becomes *dogma*; the myth of the expulsion from Paradise becomes the dogma of original sin; the myth of the son of God becomes the dogma of the incarnation and of the Trinity. Nor must it be thought that for its part philosophism does not accomplish the opposite transi-

tion. Every philosophy of nature ends by appearing as a *mythology of nature*, every philosophy of history as an *apocalypse*. Sometimes even a sort of revelation occurs in them, and we often find that the unthinkable connections of concepts constituting those pseudo-philosophies are obtained and comprehended in virtue of second sight, as the result of a mental illumination, which is the prerogative of but a few privileged persons. Finally, philosophism and mythologism embrace one another and fall embracing into empiricism and into the other forms of error previously described.

Scepsis.

This perpetual transition from one form of error to another gives rise to a *scepsis*, which promotes the reciprocal dissolution of errors, and scorning illusions and confusions, throws their *mental vacuity* into clear light. Such a scepsis fulfils an important function. The lies of æstheticism, mathematicism, philosophism, mythologism, cannot resist it. Their little wordy strongholds are broken into; the shadows are dispersed. Especially against mythologism, which in a certain sense may be called the most complete negation of thought, a scepsis is helpful; and owing to the resistance offered here more than elsewhere, by passions and interests, it

often takes the form of violent satire. The last great epoch of this strife is what is called the *Aufklärung*, Encyclopedism or Voltaireism, and was directed against Christianity, especially in its Catholic form. We must make so many reservations in what follows concerning the enlightened Encyclopedist and Voltairean attitude, that here we feel obliged to indicate explicitly its serious and fruitful side.

V

DUALISM, SCEPTICISM AND MYSTICISM

TOTAL scepticism can be reached only through *dualism*, which, in addition to being a particular error in a given philosophic problem, is a logical error, consisting in the attempt to affirm two methods of truth at the same time—the philosophic method and the non-philosophic method, however the second of these be afterwards determined. Such an error would not be error but supreme truth, if the various methods were given each its due post (which is what has been attempted in this Logic); but it becomes error when the various methods are made philosophical and placed *alongside* the philosophical. This is the error of those conciliatory people, who, unwilling to seek out where reason stands, admit that reason is operative in all of them, and divide the kingdom of truth amongst all in equal parts. Thus arise those logical doctrines which demand for the solution of philosophic problems, the

Dualism.

successive or contemporaneous application of the naturalistic method, of mathematics, of historical research, and so on. At the least they demand the combination of the naturalistic method (empiricism) with the speculative and the use of what they call the double criterion of *teleology* and *causality*, or of *double* causality. To the question, what is reality, they reply with two methods and consequently offer two concurrent and parallel realities. Beneath the appearance of treatment and solution, they abandon the philosophic problem. Instead of conceiving, they describe, and description is given as concept, and concept as description: hence the justifiable intervention of the scepsis.

Scepsis and scepticism.

But the scepsis, which clears the ground of all forms of erroneous logical affirmation, is the negation of error and consequently the negativity of negativity. The negativity of negativity is affirmation, and for this reason, the true scepsis, like every true negation, always contains a positive content in the negative verbal form, which can be also verbally developed as such. If this positive content, instead of being developed, is choked in the bud, if instead of negation, which is also affirmation, a mere negation is given,—an abstract negation, which destroys without con-

structing, and if this negation claims to pass as truth, the final form of error is obtained, which is no longer called scepsis, but *scepticism.*

Scepticism is the proclamation of mystery made in the name of thought;—a definition the contradictoriness of which leaps to the eye. It is mortally wounded both by the ancient dilemma against scepticism and by the *cogito* of Descartes. Nevertheless, since a singular tenderness for the idea of mystery seems to have invaded the contemporary world, it is desirable to leave open no loophole whatever for misunderstanding. The *mystery* is *life itself*, which is an eternal *problem* for thought; but this problem would not even be a problem, if thought did not eternally solve it. For this reason, both those who consider mystery to be definitely penetrated by thought and those who consider it impenetrable are equally wrong. The first we already know: they are the philosophists who reduce reality to pure terms of abstract thought, by breaking up the *a priori* synthesis and by neglecting the historical element, which is ever new and ever assuming forms not determinable *a priori.* Thus, they claim to shut up the world for ever in one single act (maybe in some particular philosophic system). Through their excessive love of the infinite they

Mystery.

make it finite; the sun and the earth and all the stars, the historical forms of life, and what is called human life, which has been known for some thousands of years, are transformed by them into categories of thought, solidified and made eternal. This conception, which appears (at least as a tendency) in certain parts of the Hegelian philosophy, is narrow and suffocating. The spirit is superior to all its manifestations hitherto known, and its power is infinite. It will never be able to surpass itself, that is to say, its eternal categories, just as God (according to the best theological doctrines) could destroy heaven and earth, but not the true and the good, which are his very essence; yet the spirit is able to surpass, and actually does surpass, its every contingent incarnation. The world, which is abstractly assumed to be more or less constant, is all in movement and becoming. Those who will be raised up to think it will know what worlds will issue from this world of ours. That we cannot know, for we must think this world which exists at our moment, and must act on the basis of it.

Critique of the affirmations of mystery in philosophy.

But if the philosophers incur the guilt of arrogance, the sceptics, who affirm a mystery, that is to say, that reality is impenetrable to

thought, fall under the accusation of cowardice. These, when faced with the problems of the real (soluble, we repeat, by the very fact that they are problems), avoid the hard work of dominating and penetrating them, and think it convenient to wrap themselves in abstract negation and to affirm that *mystery is.* There is mystery, without doubt; and this means that there is a problem, something that invokes the light of thought. And it is a beautiful solution which these mysterious ones and sceptics offer, for it consists in stating the problem and leaving it untouched. In the same way, when a man asks for help, we might claim to have given it to him when we had noticed his request. Charity consists in hastening to render effective aid, not in noting that aid has been asked for and then turning the back. To think is to break up the mystery and to solve the problem, not simply to recognize that there is a problem and a mystery, and to renounce seeking the solution as though it had already been given and the matter settled by that recognition.

It seems strange that it should be necessary to explain these elementary concepts; yet in our time it is necessary, so much have those concepts been darkened for historical reasons, which it

would take long to expound here, and which can all of them be summarized as due to a certain moral weakening. And it may be opportune here to give a warning (since we are dealing with a theme that belongs to the elementary school of philosophy) that to inculcate the courage to confront and to solve the problem and to conquer the mystery, is not to counsel the neglect of difficulties, or superficiality and arrogance. Mysteries are covered and must continually be covered by their own shadows; problems torment and must torment, yet it is only through these shadows and by means of those torments that we attain to momentary repose in the true; and only thus does repose not become sloth, but the restoration of our forces to resume the eternal journey. Superficiality, arrogance, neglect of difficulties, belong to the sceptics who deafen themselves with words and contrive to live at their ease in their abstract negation. True thinkers suffer, but do not flee from pain. "*Et iterum ecce turbatio* (groans St. Anselm amid the anxious vicissitudes of his meditations), *ecce iterum obviat maeror et luctus quaerenti gaudium et laetitiam. Sperabat jam anima mea satietatem, et ecce iterum obruitur egestate. Conabar assurgere ad lucem Dei, et recidi in tenebras meas: immo non modo*

cecidi in eas, sed sentio me involutum in eis. . . ."[1] Such words as these are the pessimistic lyric of the thinker. Sceptics create no such lyric, because they have cut the desire at the root. They are as a rule blissfully calm and smiling.

Agnosticism a particular form of scepticism.

There is a form of scepticism which would like to appear critical and refined and which takes the name of *agnosticism.* It is a scepticism limited to ultimate things, to profound reality, to the essence of the world, which amounts to saying that it is limited to the supreme principles of philosophy. Now, since the principles of philosophy are all equally supreme, such agnostic scepticism extends its affirmation of mystery over neither more nor less than the whole of philosophy and consequently over the whole of human knowledge. Its limits would be nothing less than the boundaries of knowledge. Indeed, agnosticism is the spiritual fulfilment sought by all those who negate philosophy, such as æstheticists, mathematicians, and especially empiricists; and agnostics and empiricists are ordinarily so closely connected that the one name is almost synonymous with the other.

Mysticism.

The sceptical error, which consists in stating the problem as solution and mystery as truth, can give way to another mode of error, in which the

[1] *Proslog.*, c. 18.

very affirmation of scepticism is denied and it is recognized that thought cannot explicitly state mystery. But this recognition, which would imply that of the authority of thought, is strangely combined with the most precise negation of such authority. Thought being excluded, either affirmatively or negatively, as in the self-contradiction of scepticism, what remains is life, no longer a problem, or a solution of a problem, but just life, life lived. To affirm that truth is life lived, reality directly felt in us as part of us and we part of it, is the pretension of *mysticism*. This is the last general form of error that can be thought; and its self-contradiction is evident from the genetic process which we have already expounded. Mysticism affirms, when no affirmation is permitted to it; and it is yet more gravely contradictory than scepticism, which, though forbidding to itself logical affirmation, does not forbid itself speech, that is to say, æsthetic expression. To mysticism not even words can be permissible, because mysticism, being life and not contemplation, practice and not theory, is by definition *dumbness*. But we shall say no more of mysticism, having had occasion to refer to it, as also to æstheticism and empiricism, at the beginning of this treatise on Logic.

When we consider these errors more closely, it is easy to see that dualism, scepticism, and mysticism manifest themselves not only in the forms of thought, in philosophy as Logic, but also in all the other particular philosophic problems, distinct from those that are peculiar to Logic, and in the errors due to them. The complete enumeration of these and their concrete determination would (as has already been said) require the development of the whole philosophic system, and therefore cannot all be contained in the present treatise. Indeed, they take their name, not from the forms of the spirit, with which the logical form is confused, or from the internal mutilation of the logical form, but from the confusion and mutilation of the remaining spiritual forms. They are no longer called æstheticism, mathematicism, or philosophism, but ethical utilitarianism, moral abstractionism, æsthetic logicism, sensationalism and hedonism, practical intellectualism, metaphysical dualism or pluralism, optimism and pessimism, and so on. It is not those who, as in the previous instances, deny philosophy itself, that fall into such errors, but those who admit it and carry it out more or less badly in its other parts. Without the admission of the method of philosophic thought, and without

Errors in the other parts of philosophy.

the assertion of a concept, it is impossible to conceive logical usurpations in the domain of another concept, which is not less necessary than the first to the fulness and unity of the real.

Ethical utilitarianism, for instance, thinks the concept of utilitarian practical activity; but its fallacy consists in arbitrarily maintaining that the concept of utility altogether exhausts that of the practical activity, thus negating the other concept distinct from it, the practical moral activity. *Moral abstractionism* commits the opposite error, affirming the moral activity, but negating the utilitarian. *Æsthetic logicism* rightly affirms the reality of the logical mental form, but is wrong in not recognizing the intuitive mental form and in considering it to be resolved in the logical form. Æsthetic *sensationalism*, directing its attention to crude and unexpressed sensation, emphasises the necessary precedent of the æsthetic activity, but then makes of the condition the conditioned, defining art as sensation. Æsthetic *hedonism, utilitarianism or practicism*, is true in so far as it notes the practical and hedonistic envelope of the æsthetic activity; but it becomes false in so far as it takes the envelope for the content, and treats art as a mere fact of pleasure and pain. *Practical intellectualism* perceives that the will is

not possible without a cognitive basis, but by exaggerating this, it ends by destroying the originality of the practical spiritual form, and reduces it to a complex of concepts and reasonings. In like manner, *metaphysical dualism* avails itself of the difference between the concept of reality as spirit and that of reality as nature, the one arising from logical thought, the other from an empirical and naturalistic method of treatment, in order to transmute them into concepts of two distinct forms of reality itself, as spirit and matter, internal and external world, and so on. *Pluralism* or monadism, confounding the individuality of acts with the substantiality which belongs to the universal subject, makes entities of single acts and turns them into a multiplicity of simple substances. *Pessimism* and *optimism*, each one availing itself of an abstract element of reality, which is the unity of opposites, maintain that reality is all evil and suffering, or all goodness and joy. This process of exemplification could be carried much further, and would become, as we see, a deduction of all philosophical concepts and errors.

Conversion of these errors with one another and with logical errors.

Now, each one of those false solutions, obeying the law of errors, is obliged, in order to maintain itself, to pass into that from which it

was distinguished, and then to pass back again from that to this. Thus utilitarianism becomes abstract morality and abstract morality utilitarianism. Hence the work of scepsis and the consequent appearance of a *particular scepticism of this or that concept.* Ethics having vainly struggled with the alternate negations, of utility and of morality, ends in *ethical scepticism*; Æsthetic torn between sensationalism and utilitarianism and logicism, and other errors, and destroying them all with its scepsis, ends in *æsthetic scepticism*; Metaphysics, torn between materialism, abstract spiritualism, dualism, pluralism, pessimism, optimism, and other erroneous views, ends in *metaphysical scepticism.* And to these errors of particular scepticism, errors of *particular mysticism* soon succeed. Thus we hear it said that there is no concept of the beautiful, as there is of the true or the good, but that it is only felt and lived; or, again, that there is no possible definition of what is good, since it concerns a thing that must be left to sentiment and to life; or, finally, that thought has value within the limits that abstraction has value, but that it is impotent before complete reality, because life alone is capable of comprehending reality, by receiving it into its very bosom.

On the other hand, it is not possible that any æstheticism, empiricism, mathematicism, philosophism, mythologism, or logicism whatever, should remain limited to a determinate philosophic concept without coming in contact with others, because those forms of error strike at the logical form of thought itself, and therefore equally at all other philosophic concepts. The ethical or æsthetic empiricist, for instance, must logically affirm a general philosophic empiricism if he does not wish to correct himself by contradicting himself (an hypothesis which must be neglected and left to be understood in this consideration of the simple, elementary, fundamental, or *necessary* forms of error). He who in a particular philosophic problem has committed a confusion of concepts, and has thence arrived at a particular scepticism and mysticism, is led by the systematic and unitary character of philosophy to widen that mysticism and scepticism from particular to general. From this general mysticism and scepticism, he is led to return gradually to mythologism, philosophism, empiricism, and to the other negations of the logical form of philosophy. Everything is connected in philosophy and everything is connected in error, which is the negation of philosophy.

VI

THE ORDER OF ERRORS AND THE SEARCH FOR TRUTH

Necessary character of the forms of errors. Their definite number.

EVERYTHING is connected in errors; error has its necessary forms. This implies, in the first place, that the possible forms of errors, the logical forms of the illogical, are *so many* and *no more*. Indeed, the forms of the spirit or concepts of reality, which can be arbitrarily combined, can be stated as a finite number (where the process of numbering can be applied to them). Consequently, the arbitrary combinations or errors which arise from them can also be similarly numbered. Only the individual forms of error are infinite, and that for the same reason which we have already given, as the individual forms of truth are infinite. Problems are always historically conditioned, and the solutions are conditioned in the same way; even false solutions, which are determined by feelings, passions, and interests, also vary according to historical conditions.

In the second place, and as corollary to the

preceding thesis, the possible forms of errors present a necessary order; and this, because the forms of the spirit or the concepts of reality stand in a necessary order to one another. They cannot be placed after or before one another nor changed at will. This necessary order is, as we know, a genetic order of degrees, and consequently the possible forms of errors constitute a series of degrees. It is commonly said that *error has its logic*, and we must say more correctly, that it cannot constitute itself as error, save by borrowing logical character from truth. *Their logical order.*

This is already clearly seen in the exposition given of the forms of logical error, and more clearly still when, resuming, we consider that the spirit, when it rebels against the concept, must by this very act affirm the term which is distinct from the concept, whether it be called representation, intuition, or pure sensation. Hence the necessity of the form of error (in a certain sense the first), which is *æstheticism*,—the affirmation of truth as pure sensation. Below this stage, the spirit can descend to annul the problem in *dualism*; or, going further and abandoning affirmation, it may fall into scepticism; or, finally, abandoning even expression, it may fall into *dumbness*, or *mysticism*, which is the lowest degree. Above *Examples of this order in the various parts of philosophy.*

æstheticism it can raise itself to try to take refuge in *empiricism*, in which is posited a universal, but one that is merely representative and, therefore, a false universal. It is the second step, nor can any other be conceived as second :—we must give a false value either to the pure representation (æstheticism) ;—or (taking the second step), to the representation and the concept together, as is the case in the form of the empirical concept (empiricism). The third step is the desperate escape from the insufficiency of the empirical concept, by means of the abstract concept, which guarantees the universality which the other lacks, but gives an empty universality (mathematicism). Finding no refuge in this emptiness from the objections of its adversaries, it is obliged finally to enter philosophy. But the erring spirit continues its work in philosophy itself and, once it has taken possession, abuses it. Now it is not possible to abuse philosophy, save by reducing it either to a concept without intuition, which is nevertheless taken as a synthesis of concept and intuition (*philosophism*); or to an intuition without concept, which, in its turn, is taken as the requisite synthesis (*mythologism*). The result of all this process is always the renunciation of the philosophic problem, disguised by the admission of

the double method (dualism), and hence the descent below the logical form, either with the affirmation which denies itself (scepticism), or, again, with that which denies even the possibility of expression (mysticism) and returns to life, which is not a problem at all, being life lived.

The same thing occurs with the other errors, when we refer to the other concepts of the spirit or of reality, although we shall not be able to give the complete series without summarizing the whole of philosophy, which is not necessary here, and by its excessive concentration and extreme brevity would be obscure. Suffice it to say, by way of example, that the ethical problem, besides being negated by means of erroneous sensationalist, empiricist, and mythologist solutions, and so on (to which, in common with all philosophic problems, it is subject), can be negated by practical intellectualism, which does not recognize a practical problem side by side with that of the theoretic spirit, and reduces virtue to knowledge. Hence *ethical intellectualism.* Since ethical intellectualism cannot resist objections, it is obliged to introduce at least the slightest practical element that can be admitted, which is that of individual utility, and resolving morality into this, it then presents itself as *ethical*

utilitarianism. This in its turn, finding itself in contradiction with the peculiar character of morality, which goes beyond individual utility, arranges to recognize and to substitute for the first a super-individual utility, which is the universal practical value or morality. And thus, by negating the first on account of the second concept, it presents itself as *moralism* or *ethical abstractionism.* The impossibility of negating both the first and the second, and the necessity of affirming both, urge the acceptance of the final form of *practical dualism*, in which utility and morality appear as co-ordinated or juxtaposed. Each one of these arbitrary doctrines is critical of the others, and, by its internal contradictions, of itself. Hence the fall into scepticism and mysticism. The circle of error can be traversed again, but it is impossible to alter the place that each of those forms has in the circle, by placing, for instance, practical dualism before utilitarianism or intellectualism after moralism.

Spirit of error and spirit of search.

There is no gradual issuing from the infernal circle of error, and salvation from it is not possible, save by entering at one stroke into the celestial circle of truth, in which alone the mind rests satisfied as in its kingdom. The spirit that *errs* or flees from the light must be converted

into the spirit of *search*, that longs for the light; pride must yield to humility; narrow love for one's own abstract individuality become wider and elevate itself to an austere love, to an unlimited devotion toward that which surpasses the individual, thus becoming an "heroic fury," the *amor Dei intellectualis*."

Immanence of error in truth.

In this act of love and fervour the spirit becomes pure thought and attains to the true, is indeed transmuted into the true. But as spirit of truth it possesses truth and also its contrary transfigured in that. The possessing of a concept is the possession of it in all its relations, and so are possessed all the modes in which that concept can be wrongly altered by error. For instance, the true concept of moral activity is also the concept of utilitarianism, of abstractionism, of practical dualism, and so on. The two series of knowledge, that of the true and that of its contrary, are, in truth, inseparable, because they really constitute one single series. The concept is affirmation-negation.

Erroneous distinction between possession of and search for truth.

It will be said that this is perhaps exact in the case of the *possession* of truth, but not in that of the *search* for it, where the two series may well appear disunited. Truth, to one who searches, is at the top of the staircase of errors, and as it

is possible to climb a great part of the staircase without reaching what is at the top of it, so when once the desired place has been reached, it is possible not to see or not to remember the staircase that is below. But the possession of truth is never static, as in general no real fact is static. The possession of and the search for truth are the same. When it seems that a truth is possessed in a static way and almost solidified, if we observe closely we shall see that the word expressing it, the sound of it, has remained, but the spirit has flown away. That truth was, but is no longer thought, and so is not truth. It will be truth only when it is thought anew, and thinking and thinking anew are the same, since each rethinking is a new act of thought. In thinking the truth is search for truth; it is a most rapid ideal motion which, starting from the centre, runs through all the possibilities of error, and only in so far as it runs through and rejects them all does it find itself at its centre, which is the centre of motion.

The search for truth in the practical sense of preparation for thought; and the series of errors.

In order to separate truth from the search for truth this latter must be understood, not as the will for thought and so as thought in action, but as the *will which lays down the conditions for thought*, the will which prepares itself for thought,

but does not yet think effectually. This indeed is the usual meaning of the word "search." To search is to stimulate oneself for thinking, by employing opportune means for that purpose. And there is no more opportune means than that of confronting one with another the various forms of the spirit and the various concepts; because in the course of that confrontation there is produced the true combination; that is to say, thought, which is truth, is aroused. To search means therefore to *run through the series of errors.*

Transfiguration, in the search thus understood, of error into suggestion or hypothesis.

But the seeker sets to work in quite a different spirit from that of the assertor of errors. The spirit of research is not the rebel erring spirit, and therefore the path that both follow is only the same in appearance; the first was the path of errors, but the second can only be so called by metaphor. Errors are errors when there is the will for error. Where, on the other hand, there is the will to unify material and to prepare the conditions of thought, the improper combination of ideas is not indeed error, but *suggestion* or *hypothesis.* The hypothesis is not an act of truth, because either it is not verified and so reveals itself as without truth, or it is verified and becomes truth only at the moment in which

it is verified. But neither is it an act of error, because it is affirmed, not as truth, but as simple means or aid toward the conquest of truth. In the doctrine of search, the series of errors is all redeemed, baptized, or blessed anew; the diabolic spirit abandons it precipitately, leaving it void of truth, but innocent.

Distinction between error as error and error as hypothesis.

The distinction between error as *error* and error as *suggestion*, between *error* and *hypothesis* or heuristic expedients, is of capital importance. It is found as basis of some common distinctions, such as those between *mistake* and *error*, between error committed in *good faith* and error committed in *bad faith*, and the like. These and others like them show themselves to be certainly untenable, because error as error is always in bad faith, and there is no difference between error and mistake, save an empirical difference, or a difference of verbal emphasis, for it can be said according to empirical accidents that an affirmation is either simply erroneous or altogether a mistake. But although they cannot be maintained as they are formulated, they nevertheless suggest the desirability and the anticipation of this true and profound distinction.

On the other hand, error and suggestion, error and heuristic procedure, since they have

in common the practical, extrinsic, and improper combination of ideas, stand in this relation to one another, that the suggestion is not error, but *error always contains in itself willingly or unwillingly a suggestion.* The erring spirit, though without intending it, prepares the material for the search for truth. It means to evade that search or to bring it to an arbitrary end; but in doing so it breaks up the clods of earth, throws them about, ploughs and fertilizes the field where the truth will sprout. Thus it happens that many combinations of ideas, proposed and maintained through caprice and vanity with the lawyer's object of scoring his point, or of shining and astonishing with paradox, or for pastime and for other utilitarian reasons, have been adopted by more serious spirits as steps in the progress of research. The enemies of the truth not only testify to the truth but come to serve it themselves, through the unforeseen consequences of their work. A sort of gratitude comes over us at times and makes us tender toward these adversaries of the truth, because we feel that from them has come the stimulus to obtain it, as from them come the strengthening of our hold upon it and the inspiration, the clear-sightedness, and the warmth of the defence of it that we make against them.

Immanence of the suggestion in error itself as error.

Individuals and error.

But it is not necessary in yielding to the generous feeling for human fraternity to exaggerate in this last direction. The gratitude that we feel is not deserved by them; at the most, it is God or the universal spirit or Providence who deserves it. They did not wish to serve the truth and did not serve it, save through consequences which are not their work. One-sided and abstract optimism has intruded here also; and perceiving in error the element of suggestion, it has altogether cancelled the category of error in favour of that of suggestion and has pronounced that man always seeks the true, as he always wills the good. Certainly; but there is the man who stops at his individual good, *fruges consumere natus*; and there is the man who progresses to the universal good. There is the man who combines words to give himself and others the illusion of knowing what he does not know and of being able to attend to his own pleasures without further trouble; and there is the man who combines words with anxious soul and spirit intent, *venator medii*, a hunter of the concept. Here, too, the truth is neither in the optimism nor in the pessimism, but in the doctrine, which conciliates and surpasses them both. Nor does it matter that owing to the defect of abstract

optimism that very philosopher, who did more than any other to reveal the hidden richness of the dialectical principle, was not able to look deeply into the problem of error.

The conscience of humanity well understood knows how to do justice to all men, without, on that account, confounding him who seeks with him who errs, the man of good will with the utilitarian. It does justice to them, because in every man, indeed at every instant in the life of every man, it discovers all those various spiritual moments, both inferior and superior. Error and the search for truth are continually intertwined. Sometimes a beginning is made with research, and it ends with an obstinate persistence in the suggestion that has been made, which is converted into a result and an erroneous affirmation. At others a beginning is made, with the deliberate intention of escaping difficulties by means of some sort of a combination of ideas; and that combination arouses the mind and becomes a suggestion for research, which is followed until peace is found in the truth. Each one of us is at every moment in danger of yielding to laziness and to the seduction of error and has hope of shaking off that laziness and following the attraction of truth. We fall and rise up again at every

instant; we are weak and strong, cowardly and courageous. When we call another weak and cowardly, we are condemning ourselves; when we admire another as strong and courageous, we idolize the strength and courage which is active within us. When we are in the presence of a complex product, as, for example, a faith, a doctrine, a book, it would be naïve and fallacious to look upon it as only error or as only suggestion. For it is both the one and the other; that is to say, it contains equally the moments of error properly so-called, and the other moments of suggestion and search; the voluntary interposition of obstacles to the truth and the voluntary removal of such obstacles; the disfigured image of the truth and the outline of the truth. Sometimes we are unable to say of ourselves whether we are erring or are seeking, whether we believe that we have found the whole truth or only discovered a ray of it. The logical criticism which implacably condemns us seems to be unjust, although we cannot contest its arguments which impose the truth upon our thought. We feel that that truth was in a way sought, seen for a moment, and almost possessed in that spiritual state of ours, which has been summarily and abruptly condemned by others as altogether erroneous.

The double aspect of errors.

For this reason even that which has been rejected and blamed as false from one point of view must be accepted and honoured from another as an approach to truth. Empiricism is perverse in so far as it is a construction opposed to the philosophic universal, but it is innocuous and indeed beneficial in so far as it is an attempt to rise from pure sensation and representation to the thinking of the universal. Scepticism as error annuls the theoretic life; but as suggestion it is necessary to the demonstration of the impossibility of dwelling in that desert when all false doctrines have been annulled. Mythologism presents this double aspect in a yet clearer manner; religion is the negation of thought, but it is also in another aspect a preparation for thought; the myth is both a travesty and a sketch of the concept; hence every philosophy feels itself adverse to myth and born from myth, an *enemy* and a *daughter* of religions. In what is empirically defined as religion or as a body of religious doctrines, for example, in Christianity, in its myths and in its theology, there is so much of truth and suggestion of truth that it is possible to affirm (always from the empirical point of view) the superiority of that religion over a well-reasoned but poor, a correct but sterile philosophy.

Nevertheless, a period of reverence, of attentive harkening, of philosophic study and criticism, which is not pure scepticism, succeeds to a period of encyclopædism, of irreligious scepticism, of enlightenment, and of Voltaireism. Those who in the nineteenth or in this twentieth century have repeated the Voltairean scepticism and have jibed at religion have with good reason been considered superficial of intellect and soul, vulgar and trivial people. The philosophy of the eighteenth century has filled and filled well the office of enemy of religion; that of the nineteenth century has disdained to give blows to the dead and has adopted towards religion the attitude of a pious daughter and diligent heir. For our part we are persuaded that the inheritance of religion has not been well and thoroughly utilized. This inheritance is at bottom indistinguishable from the philosophic inheritance, for is there not religion, in, for instance, the Cartesian idea of God, which unifies the two substances and guarantees with its truth the certainty of our knowledge? And is it not also philosophy, that is to say, the concept (in however gross a form), of the immanent Spirit which is a self-distinguishing unity and certainty of itself?

We have now attained to the theory of research, yet we cannot abandon the survey of the necessary forms of error without mentioning a new form which arises precisely from the confusion between truth and the search for the conditions preparatory to truth, between truth and hypothesis. This error, which converts Heuristic into Logic, may be called *hypothesism*. It asserts that in regard to truth man can do nothing more than propose hypotheses, which are said to be more or less probable, so that his fate is not dissimilar to the punishments which were assigned to Tantalus, Sisyphus, and the Danäids. But in the kingdom of the True, differently from that of Erebus:

Last form of the methodological error; Hypothesism.

> The birds do not feed,
> The wheels do not turn,
> The stone is not rolled up the high mountain,
> Nor water drawn with the sieve from the fountain.

The hypothesis is made, because it serves toward the attainment of the truth; did it not serve this end it would not be made. The spirit does not admit waste of time; for it time is always money. Hypothesism is sometimes restricted to the supreme principles of the real, or to what is called metaphysics, which would thus be always hypothetical; but for the reasons given in our

discussion of agnosticism, if the principles of the real were hypothetical, the whole truth would be so, that is to say, there would not be any truth. For the rest, hypothesism, besides being internally contradictory, openly reveals that it is so, in its reference to the greater or lesser *probability* of hypotheses. It would be impossible to determine the degree of approximation to the true without presupposing a criterion of truth, a truth and consequently the truth. We should hardly have made mention of this error did it not constitute the fulcrum of some of the most celebrated and revered philosophies of our times.

VII

THE PHENOMENOLOGY OF ERROR AND THE HISTORY OF PHILOSOPHY

Inseparability of the phenomenology of error from the philosophic system.

THE phenomenology of error, in its double sense of error and of suggestion, coincides therefore with the philosophic system. Both error and suggestion are improper combinations of philosophic ideas or concepts. To determine these improper combinations is equivalent to showing the *obverse* of that of which the philosophic system is the *face*. But face and obverse are not separable, for they constitute a single thought (and single reality), which is positivity-negativity, affirmation - negation. There is, therefore, no phenomenology of error outside the philosophic system, nor a philosophic system outside the phenomenology of error; the one is conceived at the moment when the other is conceived. And since the philosophic system and the doctrine of the categories are the same, the phenomenology

of error is inseparable and indistinguishable from the doctrine of the categories.

The eternal going and coming of errors.

As such the phenomenology of error is an ideal and eternal circle, like the eternal circle of the truth. Its stages are eternally traversed and retraversed by the spirit, being the stages of the spirit itself. At every instant of the life of history and of our individual life there are represented the stages that have been surpassed and must again be surpassed: the lower stages return and announce beforehand the higher.

Returns to anterior philosophies, and their meaning.

In this lies the origin of a fact which cannot fail to attract attention in the history of philosophy: the tendency which is found there, to *return* to one or other of the philosophies of the past, or, more correctly, to one or other of the philosophic points of view of the past. The thirteenth century returned to Aristotle, the Renaissance to Plato; Bruno revived the philosophy of Cusanus, Gassendi that of Epicurus; Hegel wished to renew Heraclitus; Herbart, Parmenides; in recent times a return has been made to Kant, and in times yet more recent to Hegel. These are spiritual movements, which must be understood in all their seriousness. This consists wholly in the need of the philosophic spirit of a certain moment, which, struggling with

an error, discovers the true concept with which it should be corrected, or at least, the superior and more ample suggestion, to which we must pass in order to progress. And since that concept or suggestion had already been represented in an eminent degree in the past by one particular philosopher, or by one particular school, they speak of the necessity of again asserting the superiority of that philosopher and his school against other philosophers and other schools. In reality neither Aristotle nor Plato returns, nor Cusanus nor Epicurus, nor Heraclitus nor Parmenides, nor Kant nor Hegel; but only the mental positions of which these names are, in those cases, the symbols. The eternal Platonism, Aristotelianism, Heracliteanism, Eleaticism are in us, as they were formerly in Plato and in Aristotle, in Heraclitus and in Parmenides. Divested of those historical names, they are called transcendentalism and immanentism, evolutionism and anti-evolutionism, and so on. To the philosophers of the past, as men of the past, no return is made, because *no return is possible.* The past lives in the present and the pretence of returning to it is equivalent to that of destroying the present, in which alone it lives. Those who understand *ideal* returns in this

empirical sense, do not in truth know what they are saying.

The false idea of a history of philosophy as the history of the successive appearances in time of the categories and of errors.

But just because the phenomenology of error and the system of the categories are outside time, we must also recognize the fallacy of a history of philosophy which expounds the development of philosophic thought as a successive appearance in time of the various philosophic categories and of the various forms of error. On this view the human race seems to begin to think truly philosophically at a definite moment of time and at a definite point of space; for example at a definite year of the seventh or sixth century before Christ, at a definite point of Asia Minor, with Thales, who surpassing mere fancy posits as a philosophic concept the empirical concept of water; or in another year and place, with Parmenides, who posits the first pure concept, that of being. And it seems further to progress in philosophic thinking with other thinkers, each of whom either discovers a concept or offers a suggestion of one. Thus each takes the other's hand and they form a chain which is prolonged to one who, more audacious and fortunate than the others, gives his hand to the first, and unites them all in a circle. After this, there would remain nothing else to do but to dance eternally,

as the stars dance in the imaginations of the poets, without any further necessity to devise suggestions and to risk falling into error. All this is brilliant but arbitrary. The categories are outside time, because they are all and singly in every instant of time, and therefore they cannot be divided and impersonated within empirical and individual limits. It is not true that each philosophic system has for its beginning a particular category or a particular suggestion. A philosophic system, in the empirical signification of the word, is a series of thoughts whose unity is the empirical bond of the life of a definite individual. It is therefore without beginning, since it does not constitute a true unity and refers on the one hand to its predecessors, on the other to those who continue it, and on all sides to its contemporaries. In the strict sense, in that system, in so far as it is philosophic, there is always the whole of philosophy; and therefore, as we have previously seen, all philosophic systems (including materialism and scepticism) have, whether they admit it or not, displayed or implied the same principle, which is the pure concept, and every philosophy is idealism. Nor is it true that there is progress in the history of philosophy, in the sense of the passage from one category to

another superior category, or from one suggestion to another superior suggestion. Speaking empirically, we should have in this case to admit regress also, because it is a fact that a return is made to inferior categories and suggestions. Philosophically, we can speak in this case, neither of progress nor of regress, seeing that those categories and suggestions are eternal and outside time.

Finally, this conception of philosophic history itself declares its untenability, since in its last term it is logically obliged to posit a definitive philosophy (which is that represented by him who constructs such a history of philosophy), whereas there is nothing definitive in reality, which is perpetual development. Those very historians of philosophy themselves, who have desired and in part attempted to give actuality to that conception, have been perplexed at the assumption of so great a responsibility as to proclaim a *definitive philosophy*, that is to say, to decree the retirement of Thought and so of Reality.

Philosophism both of this false view and of the formula concerning the identity of philosophy and history of philosophy.

The error which appears in this conception of philosophic history, is the same that we have already studied under the name of philosophism, and which appears here in one of its special applications. The formula of the error is the *identity of Philosophy with the History of philo-*

sophy. The sense in which this is meant is at once shown by the tendency which exists in this identity of the two terms, to be enlarged into a third term, that is to say, into the recognition of the identity of philosophy and of the history of philosophy with the *Philosophy of history.* And this Philosophy of philosophic history, like every philosophy of history, converts representations and empirical concepts into pure concepts assigning to each one the function which properly belongs to the categories, corrupting philosophy and history and becoming shipwrecked in a sort of mythologism and propheticism.

Distinction between this false idea of a history of philosophy and the books that are so entitled or profess a like programme.

But, as in the case of the philosophy of history in general, so also in this application of it to the history of philosophy, it is necessary to recognize the elements of truth. These lie in the works of genius in *historical characterization*, which under this guise have been achieved by various thinkers and in various epochs of philosophy. Certainly Plato is not only transcendental, nor is Aristotle only immanentist; nor Kant only agnostic, nor Hegel only logical, nor Epicurus only materialist, nor Descartes only dualist; nor is Greek thought concerned only with objectivity, nor modern thought with subjectivity alone. But history takes shape as historical narrative, by noting the

prominent traits of the various individuals and of the various epochs. Without this process it would be impossible to divide, to summarize, or to record it; without the introduction of empirical concepts, history could not be fixed in the memory.[1] By means of those characterizations, it also happens that historical names can be taken as symbols of truths and errors: all the crudity of dualism is expressed in Descartes, the paradox of determinism in Spinoza, that of abstract pluralism in Leibnitz. We owe (as is admitted by all those competent to judge) the elevation of the history of philosophy from a chronicle or an erudite collection to history properly so-called, to historians of philosophy who were tainted with philosophism. And since Hegel was the first and greatest of those historians, we must impute to Hegel the arbitrary act that he committed, but also the merit of having been the first to give a history of philosophy worthy of the name and accord to him all the more merit, in so far as he almost always corrected in execution the errors of his original plan.[2]

This original plan (and in general the position taken up by the system of Hegel) may perhaps

[1] See above, Part II. Chap. III.

[2] See ch. ix. *What is Living and What is Dead of the Philosophy of Hegel*, by the Author, English translation by Douglas Ainslie.

be considered as a deviation and aberration from a just impulse, which still awaits its legitimate satisfaction. This satisfaction we have attempted to give, by going deeply into the meaning of the Kantian *a priori* synthesis and by establishing the identity of philosophy and history. Thus, as regards the question at issue, the formula that we oppose to Hegel's formula of the identity of *philosophy and history of philosophy*, is that of the identity of *philosophy and history*. This difference may at first sight seem non-existent or very slight, but yet it is substantial. Philosophy is indeed identical with history, because by solving historical problems it affirms itself, and is in this way identical with the history of philosophy, not because this is separable from other histories, or has precedence over them, but for precisely the contrary reason, that it is altogether inseparable from and completely fused in the totality of history, according to the unity in distinction already explained. Hence it is seen that philosophy does not originate in time, that there are not philosophic men and non-philosophic men, that there are not concepts belonging to one individual which another individual is without, nor mental efforts which one makes and another does not make, and that philosophy, or all the

Exact formula: identity of philosophy and of history.

categories, operates at every instant of the spiritual life, and at every instant of the spiritual life operates upon material altogether new, given to it by history, which for its part it helps to create. This amounts to saying that from that concept we obtain the criticism of philosophism and of the formula expressing the identity of Philosophy, History of Philosophy and Philosophy of history; and a more exact idea of the history of philosophy, free from the chains of an arbitrary classification.

The history of philosophy and philosophic progress.

It may seem that in this way we destroy all idea of philosophic progress; and certainly philosophy, taken in itself, that is to say as an abstract category, does not progress any more than the category of art or of morality progresses. But philosophy in its concreteness progresses, like art and the whole of life; it progresses, because reality is development, and development, including antecedents in consequences, is progress. Every affirmation of truth is conditioned by reality and conditions a new reality, which, in turn, is in its progress, the condition of a new thought and of a new philosophy. In this respect it is true that a philosophy which comes later in time, contains the preceding philosophies in itself, and not only when it is truly a philosophy,

adequate to the new times, which comprehend ancient times in themselves, but even when it is a simple suggestion, of the kind we have called erroneous and in need of correction. As erroneous suggestion it will be, ideally, inferior to the truths already discovered. The scepticism of David Hume, for instance, is inferior from this point of view, not only to Cartesianism, but even to Scholasticism, to Platonism and to Socraticism. But historically it is superior even to the most perfect of those philosophies, because it is occupied with a problem which they did not propose to themselves and initiates its solution, by forming a first attempt at solution, however erroneous. Those perfect philosophies belong to the past, this, though imperfect, has the future in itself. Thus it is explained how we sometimes find far more to learn in philosophers who have maintained errors than from others who have maintained truths; the errors of the former are gold in the quartz, which when it has been purified will add weight and value to the mass of gold, which is already in our possession and has been preserved by the latter. Fanatics content themselves with truths, however poor they are, and therefore seek those who repeat them, even though they be poor of spirit. True thinkers seek for adver-

saries, bristling with errors and rich with truth; they learn from them, and while opposing, love and esteem them; indeed, their opposing them is at the same time an act of esteem and of love.

The truth of all philosophies, and critique of eclecticism.

The philosophy which each one of us professes at a determinate moment, in so far as it is adequate to the knowledge of facts and in the proportion in which it is adequate, is the result of all preceding history, and in it are organically brought together all systems, all errors and all suggestions. If some error should appear to be inexplicable, some suggestion without fruit, some concept incapable of adoption, the new philosophy is to that extent more or less defective. But the organic reconciliation, which preceding philosophies must find in those that follow, cannot be the bare bringing them together in time, and *eclecticism*, as in those superficial spirits, who associate fragments of all philosophies without mediation. Eclecticism (from the historical point of view also, as for instance in the relation of Victor Cousin to Hegel, whom he admired, imitated and failed to understand) is the falsification or the caricature of the vastness of thought, which embraces in itself all thoughts, though apparently the most diverse and irreconcilable. The peace of the lazy, who do not collide with

one another, because they do not act, must not be made sublime and confounded with the lofty peace that belongs to those who have striven and have fraternized after strife, or, indeed, during the actual combat.

Researches concerning the authors and precursors of truths: and the reason for the antinomies which they exhibit.

A proof of this *constancy* of philosophy, which is immanent in all philosophies and in all the thoughts of men, and also of its perpetual variation and novelty of historical form, is to be found in the questions that have been and are raised, concerning the *origin* or *discovery* of truth. Hardly has the truth been discovered, when the critics easily succeed in proving that it was already known, and begin the search for *precursors*. And there can be no doubt that they are right and their researches deserve to be followed up. Every assertion of discovery, in so far as it seems to make a clear cut into the web of history, has something arbitrary about it. Strictly speaking, Socrates did not discover the concept, or Vico æsthetic fancy, or Kant the *a priori* synthesis, or Hegel the synthesis of opposites; nor even perhaps, did Pythagoras discover the theorem of the square on the hypotenuse, or Archimedes the law of the displacement of liquids. If a discovery is represented as an explosion, this happens for reasons of

practical and mnemonic convenience in narrating and summarising history; and, for that matter, the explosion, the eruption and the earthquake are continuous processes. But the rational side of the search for precursors must not cause the acceptance of the irrational side, which is the denial of the *originality* of discoveries, as though they were to be found point for point in the precursors, or as though they consisted only in the aggregation of elements which pre-existed, or in like insignificant changes of form. To attach oneself to precursors, does not mean to repeat them, but to continue their work. This continuation is always new, original, and creative and always gives rise to discoveries, be they small or great. To think is to discover. The reduction to absurdity of the wrong meaning of the search for precursors is to be found in the fact that every one of the most important thoughts can be discovered in a certain sense in common beliefs, in proverbs, in ways of speech, and among savages and children. This is so much the case that by this path we can return to the Utopia of an *ingenuous* philosophy, outside history; whereas philosophy is truly ingenuous or genuine only when it *is*, and it is not, save in History.

VIII

"DE CONSOLATIONE PHILOSOPHIAE"

Logic and the defence of philosophy.

ATTACKS upon Philosophy and defences of it have been made as more or less academic exercises. But the true defence of it can only be Philosophy itself, and above all, Logic, which, by determining the concept of Philosophy, recognizes its necessity and function. And since Logic itself teaches that a concept is not truly known, save in the system where it is shown in all its relations, the complete defence is obtained in our opinion only, when this treatise dedicated to *Logic* is placed in relation to the preceding, which treats of *Æsthetic*, and with that which follows and has for its object the *Philosophy of the practical.*

The utility of Philosophy and the philosophy of the practical.

To this last must be relegated the complete elucidation of the problem concerning the utility or non-utility of philosophy. It is a problem about which we can here raise no fundamental question, if the equation posited by us be true: philo-

sophy = thought = history = perception of reality. Thus the doubt concerning the utility of philosophy would be of equal value with the extravagant doubt as to the utility of knowledge. The philosophy of the practical also demonstrates that no action is possible, save when preceded by knowledge, and that presupposed in action there is always historical or perceptive knowledge, that is, the knowledge which contains in itself all other knowledge. And it also demonstrates that reality, being always will and action, is always thought, and that therefore thought is not an extrinsic adjunct, but an intrinsic category constitutive of the Real. Reality is action, because it is thought, and it is thought because it is action.

Consolation of philosophy, as joy in thought and in the truth. Impossibility of a pleasure arising from falsity or illusion.

If thought is so useful that without it the Real would not be, the common concept of an unconsolatory philosophy cannot be accepted. Consolation, pleasure, joy, is activity itself, which rejoices in itself. So far as is known, no other mode of pleasure, joy and consolation has yet been discovered. Now, knowledge of the true, whatever it is, is activity and promotes activity, and therefore brings with it its own consolation. "The truth, known, though it be sad, *has its delights.*" Not a few would wish to attribute

these delights, not to truth, but to *illusion.* But illusion is either not recognized as illusion, or it is so recognized. When it is not recognized as such and yet truly satisfies the mind, it cannot be called illusion, but truth, which has its own good reasons, since nothing can be held to be true without good reasons; it is that much of truth which can be noted in the given circumstances and which from the point of view of a more complete truth can only arbitrarily be called illusion: the consolation given by the pretended illusion resides, therefore, in its truth—or it is recognized as illusion, because the actual circumstances have changed; and then it is anguish and desire to attain to the truth. If there is no desire to attain to this truth, and if in order to avoid it, affirmations are brought forward, which are not adequate to the new conditions in which we find ourselves, there is error, which, as such, is always more or less voluntary; and from error, which is self-critical, arise evil conscience, and remorse, and so again anguish and desire for the truth, which dissipates illusion and produces consolation, because . . . "the truth though it be sad, yet has its delights."

Yet (it will be said), the true can be *sad*; true, but sad. This prejudice also should be eliminated. *Critique of the concept of a sad truth.*

Truth is reality, and reality is never either glad or sad, since it comprehends both these categories in itself, and therefore surpasses them both. To judge reality to be sad, it would have to be admitted that we possessed besides the idea of it, the idea of *another* reality, which should be better than the reality known to us. But this is contradictory. The second reality would be not real and therefore not thinkable, and so no idea at all of it could be formed. And if we did attempt to form an idea of it, thought, entering into contradiction with itself and striving in a vain effort, would be seized with terror, and would produce, not that ideal reality, but at the most an æsthetic expression of terror, like that of a man who looks upon a bottomless abyss.

Examples: philosophical criticism and the concepts of God and of Immortality.

Once upon a time and even to-day many found and find consolation in the idea of a personal God, who has created and governs the universe, and of an immortal life, above this life of ours, which vanishes at every instant. And this consolation seems to have diminished in our times, or to many of us, owing to Philosophies. But he who does not limit himself to the surface and analyses the state of soul of sincere and noble believers, realizes that the God who comforted them is the same who comforts us and whom our Philosophies

call the universal Spirit, immanent in all of us—the continuity and rationality of the universe—just as the Immortality in which they reposed was the immortality which transcends our individual actions, and in transcending them, makes them eternal. All that is born is worthy to perish; but in perishing, it is also preserved as an ideal moment of what is born from it; and the universe preserves in itself all that has ever been thought and done, because it is nothing but the organism of these thoughts and actions. Philosophy has rendered those concepts of God and of Immortality more exact, and has liberated them from impurities and errors and thus at the same time from perplexities and anguish; it has rendered them more, not less, consolatory. On the other hand, the absurdity which mingled with those concepts, has never consoled any one who seriously thought them—and serious thinking of them is an indispensable condition of obtaining consolation from concepts. If they are not thought, but mechanically repeated, the consolation is obtained from something else, from distraction and occupation with life lived, not from the concepts. In the effort to think a God outside the world, a Despot of the world, we are seized with a sense of fear for that God,

who is a solitary being, suffering from his omnipotence, which makes activity impossible for him and dangerous for his creatures, who are his playthings. That God becomes an object of maledictions. Equally, in seriously thinking our immortality as empirical individuals, immobilized in our works and in our affections (which are beautiful only because they are in motion and fugitive), we are assailed by the terror, not of death, but of this immortality, which is unthinkable because desolating and desolating because unthinkable. Ideal immortality has generated the poetic representations of Paradise, which are representations of infinite peace; the false concepts of an empirical immortality can generate no other representation than Swift's profoundly satirical picture of the *Struldbrugs* or immortals, plunged in all the miseries of life, unable to die, and weeping with envy at the sight of a funeral.

Consolatory virtue belonging to all spiritual activities.

But we do not wish to close these new considerations upon the old theme *de consolatione Philosophiae*, without noting that philosophy is not the sole or supreme consoler, as the philosophers of antiquity believed, and some among the moderns, who assumed the same attitude. It is neither the sole nor the supreme consoler, because thought does not exist alone, nor does

it exist above life: thought is outside and inside life; and if on one side it surpasses life, on the other it is a mode of life itself. Philosophy brings consolation in its own kingdom, putting error to flight and preparing the conditions for practical life; but man is not thought alone, and if he has joys and sorrows from thought, other sorrows and joys come to him from the exercise of life itself. And in this exercise action heals the evils of action and life brings consolation for life. The error of Stoicism and of similar doctrines consists in attributing to philosophy a direct action upon the ills of life and of making it in consequence the whole totality of the real. But philosophy has no pocket-handkerchiefs to dry all the tears that man sheds, nor is it able to console unhappy lovers and unfortunate husbands (as sentimental people pretend): it can only contribute to their comfort by healing that part of their pain which is due to theoretic obscurity. Such part is certainly not small: all our sorrows are irritated and made more pungent by mental darkness which paralyses or fetters the purification of action. But it is a part and not the whole. Every form of the activity of the Spirit, art like philosophy, practical life like theoretic life, is a fount of consolation and none suffices alone.

Sorrow and the elevation of sorrow.

"He that increaseth knowledge increaseth sorrow" is a false saying, because the increase of knowledge is the overcoming of sorrow. But it is true, in so far as it means that the increase of knowledge does not eliminate the sorrows of practical life. It does not eliminate, but *elevates* them; and to adopt the fine expression of a contemporary Italian writer, superiority is "nothing but the right to suffer on a higher plane." On a higher plane, but neither more nor less than others, who are at a lower level of knowledge, —to suffer on a higher plane, in order to act upon a higher plane.

FOURTH PART

HISTORICAL RETROSPECT

I

THE HISTORY OF LOGIC AND THE HISTORY OF PHILOSOPHY

THE three terms, *Reality, Thought and Logic*, and their relations, could be represented by a system of three circles, the one included in the other, and by marking at will as the first term that which includes all, or that which is included in all: R T L or L T R. Limiting ourselves to the first method, the first circle would be Reality, which Thought (the second circle) would think, in the same way that it would in its turn be thought in the third circle, formed by Logic, the Thought of thought, or the Philosophy of philosophy. This graphic symbol is probably destined to some fortune; but the reader must not seek it in our pages, because knowing how much inadequacy, clumsiness and danger it contains, we share the repugnance, almost instinctively felt at such materializations, which seem to be and are of slight value.

Reality, Thought and Logic.

Relation of these three terms.

The vice of that spatial figuration is that it divides into three circles what is three, but three in one, and should consequently be expressed as a triple circle which should also be a single circle, in which all the three coincide; which is geometrically unrepresentable. The relation of Reality, Thought of Reality and Thought of Thought, divided into three circles, legitimately gives rise to the question: Why should there not be a fourth, a fifth, a sixth circle (and so on to infinity) which should include respectively the third, the fourth, the fifth (and so on to infinity)? Why should not a Logic of Logic, or a thought of the thought of thought, and so on, follow the thought of thought, which is Logic? For us, this question raises no objection that need bring us to a halt for a single instant, just because we have never divided the one reality into two or more different realities (matter and spirit, nature and idea, and so on), nor into a series of different realities, the one following the other; but we have conceived it as a system of relations and of correlations, constituting a unity, indeed the only unity concretely thinkable. There is no progress to infinity, when the terms are coincident and correlative; hence to think the thought of thought would not be a new act, but equivalent

to thinking thought. The mental act will be new (and any mental act is new) for the individual who accomplishes it in conditions that are always new; but its spiritual form will always be that of Logic, which thinks thought and contains within itself, on its side, the process of reality. Further, the indifference exhibited by the symbol of the triple circle as to the determination of the first as last and the last as first, confirms for us the non-existence of a first that is only first and of a last that is only last; confirms, that is to say, the coincidence of unity in relation that is first and last. Reality is not only thought by thought, but is also thought; and thought is not only thought by Logic, but is also Logic. Those who wish to expound philosophy and history, proceeding from the centre of the logos or Logic, and those who wish to expound them, proceeding from the periphery of facts, are both right and wrong, because the centre is periphery and the periphery centre.

Non-existence of a general philosophy outside the particular philosophic sciences:

By adopting this view, which affirms the most complete immanence, it has never happened that in any part of the Real we have discovered a division between idea and fact, between general and particular, between primary and secondary

reality and the like, but we have found, in every part, relation and correlation, unity and distinction in unity. There is no general philosophy opposed to, or consequent on, or alongside particular philosophies; particular philosophy is general, and the general is the particular; nor is there a general history, which is not also particular history, and *vice versa*. History is always the history of man as artist, thinker, economic producer, and moral agent, and in distinguishing these various aspects, it gives their unity, which does not transcend these various aspects, but *is* these various aspects themselves.

and consequently of a History of general philosophy outside the histories of particular philosophic sciences.

In like manner, the History of thought, or the History of Philosophy, which is one of these determinate aspects, is distinguished in the histories of particular philosophic concepts, as the history of Æsthetic, of Logic, of Economics and of Ethics; but it is also unified in them and *consists in nothing but them*, completely resolving itself into them. There is no *general History of Philosophy*, in the sense of a history of *general Philosophy*, or of *Metaphysics*, or whatever else it may be called, outside particular histories (which are unity in particularity).

One of the errors which in our opinion vitiates the writing of the history of philosophy, appears

to be just the prejudice in favour of a treatment of the general part of this history, in which, for instance, speculations concerning practice enter only incidentally, a great part of logical doctrine is excluded as not belonging to it, and the doctrines of Æsthetic are hardly referred to at all. The prejudice is derived, in the last analysis, from the old idea of an Ontology or Metaphysic, as the science of an ideal world, of which nature and man are the more or less imperfect actualizations; hence the relegation of a great part of true and proper philosophy to what is called the human and natural world, and the looking upon this as a special philosophy, distinguished from general philosophy and consequently lying outside the true and proper history of philosophy. That prejudice, amounting almost to a survival, persists even in those who have more or less surpassed such a conception, and determines the curious configuration of a general history of philosophy, outside the special histories. Such a scheme, when closely examined, shows itself to be a complex of historical elucidations of some problems of Logic, and of some of the philosophy of the practical (individuality, liberty, the supreme good, etc.), and of some arising from their relations (knowing and being, spirit

and nature, infinite and finite, etc.). These are all without doubt arguments of philosophical history; but they must be united with the others, from which they have been wrenched, and without which they prove but little intelligible. Philosophy is present in the Poetics and the Rhetoric of Aristotle as much as in the Metaphysics; not less in the *Critique of Pure Judgment* of Kant, than in the *Critique of Pure Reason*. It is never outside those treatises concerning what are called the special parts of philosophy. The present-day historians of philosophy who have overcome so many forms of transcendence and re-established immanence, must also overcome the residue of transcendence, which, so to speak, they still retain in their own house.

Histories of particular philosophies and literary value of such division.

Certainly, the reality of the distinctions between the various aspects of the real and between the various particular philosophies renders possible literary divisions, through which there are composed special treatises upon Ethics and so upon the history of Ethic; upon Logic and so upon the history of Logic; upon Æsthetic and so upon the history of Æsthetic; but it is not possible by a like method of division to construct a treatise upon general Philosophy

and a corresponding History of general philosophy. It is not possible, because this literary division presupposes a distinction of concepts; and a general philosophy is not conceptually distinguishable. When the attempt to distinguish it is made, we have, as we saw, a mass of historical fragments taken from the various philosophic sciences; that is to say, not the coherent historical treatment of problems relating to a definite aspect of the real, but a more or less arbitrary aggregate.

History of Logic in a particular sense.

With these considerations, we have answered the question concerning the relation between the History of Logic and the History of Philosophy. This relation is the same as that between Logic and Philosophy,—terms which are capable neither of distinction nor of opposition. The history of Logic is not outside the history of Philosophy, but is an integral part of this history itself. To make it the object of special treatment always means to compose a complete history of philosophy, in which, from the literary point of view, prominence and priority are given to the problems of Logic, the others being thrown, not outside the picture, but into the background. The same may be said of the History of Æsthetic or of Ethic or of any other

particular discipline, which is never held to be distinguishable.

Works relating to the history of Logic.

Logic being more or less profoundly renovated (as we have sought to do in this book), it is natural that the histories of Logic hitherto available can no longer be completely satisfactory. For they are written from points of view that have been surpassed, such as Aristotelian formalism or Hegelian panlogism, and therefore either do not interpret facts with exactitude, or they give prominence and exaggerated importance to certain orders of facts, neglecting others far more worthy of mention and of examination.

Of the special books bearing the title of the History of Logic, there is really only one—that of Charles Prantl—which, based upon wide researches, is truly remarkable for its doctrine and for lucid and animated exposition. Unfortunately this does not go further than the fifteenth century and omits the whole movement of modern philosophy.[1] But even the period exhaustively treated by him (Antiquity and the Middle Ages) is looked at from the narrow angle of an Aristotelian and formal temperament.

[1] *Geschichte der Logik im Abendlande*, Leipzig, 1855–1870, 4 vols. Scattered memoirs of certain writers belonging to later times are being published by Prantl in academic journals, and it would be opportune to collect these in a volume.

Other works bearing the same title are not worthy of attention.[1] On the other hand, the better histories of Logic must not be sought under this title, but especially in the better Histories of Philosophy, beginning with that of Hegel, which, for the most part, is precisely a history of Logic.

In inaugurating a new treatment, governed by the principles which we have defended, we shall confine ourselves, in the following pages, to a sketch of the history of some of the principal parts of logical doctrine, without any claim to even approximate completeness, and with a view to giving simple illustrations of the things that were said in the theoretical part. In this theoretical part, in virtue of the identity of philosophy and history which we have explained, history may be said to be already contained and projected, even though names and dates are mostly omitted and left to be understood.

[1] A rapid sketch, compiled in part from the work of Prantl, with a polemical addition directed against the adversaries of the Hegelian Logic, precedes the *Logic*[2] of Kuno Fischer. The historical part of the *System der Logik* of Ueberweg (fifth edition, 1882, edited by J. B. Meyer) has an almost exclusively bibliographical character with excerpts, and that contained in L. Rabus, *Logik u. System der Wissenschaften*, Erlangen-Leipzig, 1895, is yet more arid. The *Gesch. d. Logik* of F. Harms (Berlin, 1881) is meagre in facts, verbose and vague. In recent monographs on special points, one feels the effect of what is called Logistic or new formalism, which makes the authors pursue ineptitudes and curiosities of slight value.

II

THE THEORY OF THE CONCEPT

Question as to who was the "father of Logic."

JUST as whenever in Æsthetic any one sought the "father" of the science Plato was usually named, so whenever a like enquiry has been proposed for Logic that honourable title has been almost unanimously bestowed upon Aristotle. But even if we admit (as we must) in a somewhat empirical and expedient sense, the propriety of these searches for "discoverers" and "fathers," Aristotle could not in our eyes occupy that position. For if Logic is the science of the concept, such a science was evidently begun before him. Further, Aristotle himself claimed the distinction only of having reduced and treated the theory of reasoning[1] and recognized elsewhere that to Socrates belonged the merit of having directed attention to the examination and definition of the concept (*τούς τ' ἐπακτικοὺς λόγους καὶ τὸ ὁρίζεσθαι*), that is to say, to the very

[1] *De sophist. elench.* ch. 34.

principle of logical Science,[1] the rigorous form of truth.

Socrates, Plato, Aristotle.

In this affirmation of the consistency and absoluteness of knowledge and of truth (sustained in him by a vivid religious and moral consciousness) lies the significance of Socrates as opposed to the Sophists; as indeed in the same thing lies the importance of Hellenic Logic of the truly classical period. This Logic elaborated the idea of conceptual knowledge, of science or of philosophy, and transmitted it to the modern world with a terminology, which is in great part that which we ourselves employ. We too reject in almost the same words as the Greek philosophers the renascent sophism, the perennial Protagoreanism, and the sensationalism which denies truth, and (like the ancient Gorgias), by declaring it incommunicable by the individual, individualizes and reduces it to practical utility. In Plato, the affirmation and glorification of conceptual knowledge was accompanied by contempt for the knowledge of the individual, and in comparison with the immortal world of ideas, the world of sensations was for him so dark and obscure as to disappear in his eyes like phantoms before the sun. But Aristotle, although he held

[1] *Metaphys.* M 4, p. 1078 b 28-30; cf. A 6, p. 987 b 2-3.

firmly that there is no science of the accidental and individual, and of sensation, which is bound to space and time, to the *where* and the *when*, and that the object of science is the universal, the essence, *which is being*, was less exclusive than he; and as he saved the world of poetry from the condemnation of Plato, so, in all his philosophy and in all his work as physicist, politician and historian, he affirmed the world of experience and of history.[1]

Enquiries concerning the nature of the concept in Greece. The question of transcendence and immanence.

On the other hand, there was in Socrates only the consciousness of the universal still indefinite and vague; in Plato there appeared for the first time the consciousness of the true character of the universal, and so of its distinction from empirical universals; and in Aristotle this enquiry gave important results. The problem of the nature of the concept became, then and afterwards, interwoven with that other problem of the transcendence or immanence of the concepts; but since, notwithstanding many points of contact, the two problems cannot be completely identified, they must not be confounded. Indeed, the problem of the transcendence or immanence of the universals is reducible to the more general problem of the relation between

[1] Cf. *Æsthetic*, part ii. chap. i.

values and facts, the ideal and the real, what ought to be and what is; whereas the other, concerning the nature of the universals, centres upon the distinction between universals that are truly logical, and pseudological universals, and upon the greater or less admissibility of one or the other or of both, and so upon their mode of relation. The point of contact between the two problems lies in this, that where pure and real universals are denied and only arbitrary and nominal universals allowed to subsist, the question of the immanence or transcendence of the universals also disappears. And as to the first problem and the polemic of Aristotle against Plato concerning the ideas, it has appeared to some critics (to Zeller and others) that Aristotle misunderstood his master and invented an error that Plato had never maintained, or attacked merely certain gross expositions of doctrine which were current in some Platonic school. To others again (to Lotze, for instance), it has seemed that Aristotle thought this problem, at bottom, in the same way as Plato, who by placing the ideas in a hyper-Uranian space, in a super-world or a super-heaven, thus came to refuse to them that reality which Aristotle himself refused to them and to consider them as *values*, not as *beings*;

although Greek linguistic usage prevented Plato from expressing the difference, just as it prevented Aristotle from expressing the same thing, when it led him to describe genera as "second substances" (δεύτεραι οὐσίαι). However, as regards the first interpretation, it certainly seems to us that it is impossible to raise doubts about such a document as the testimony of Aristotle[1] by means of such frequently uncertain documents as the Platonic dialogues. And as regards the second interpretation, it seems to us that it does not so much purge Plato of the vice of transcendence as convict his adversary also of sharing that vice. On this point the opposition of Aristotle to his predecessor does not coincide with that of modern nominalism and empiricism to philosophic idealism, for the former sets in question the truth of the concept itself. Aristotle denied this truth as little as Plato; indeed he expressly asserted that his predecessor was right, and approved his definite accusation of the sophists that they were occupied not with the universal but with the accidental, that is to say, with not-being.

The beginning of the enquiry as to the nature

[1] See in this connection the observations of Lasson, in the preface to his recent German translation of the *Metaphysic*, Jena, Diederichs, 1907.

Controversies as to the various forms of concept in Plato.

of universals or of ideas is to be seen, on the other hand, in Plato's embarrassments before the questions as to whether there are ideas of everything, of artificial as well as of natural things, of noble things and vile things alike, of things only or also of properties and relations; of good things or also of bad things (*καλὸν καὶ αἰσχρόν, ἀγαθὸν καὶ κακόν*).[1] He does not escape from the embarrassments, save occasionally, by making strange admissions, by accepting ideas of all the preceding, only to fall immediately afterwards into contradictions, through which however we see the outlines of the problems of to-day. Are the ideas representative concepts (of things) or are they not rather categories (ideas of relation)? Are opposites particular kinds of ideas (if there exist ideas of base and ugly things, as well as of beautiful and good things)? Is it possible to distinguish, from the point of view of the Ideas, between the natural world and the human world (between natural things and artificial)? Plato himself refers to mathematical knowledge as distinct from philosophic knowledge.

In Aristotle, the determination of the rigorous philosophic concept and its distinction from em-

[1] Cf. especially the *Parmenides*, the *Theaetetus*, and *Book of the Republic*.

The philosophic concepts and the empirical and abstract concepts in Aristotle. Philosophy, physics and mathematics.

pirical and abstract concepts make great progress, although this does not amount to a solution of those Platonic embarrassments. Aristotle accurately traces the limits between Philosophy (and so the philosophic concept) and the physical and mathematical sciences. Philosophy, the science of God or *theology* (as he also calls it), treats of being in its absoluteness, and so not of particular beings or of the matter that forms part of their composition. The non-philosophical sciences, on the other hand, always treat of particular beings (περὶ ὄν τι καὶ γένος τι). They take their objects from sense or assume them by hypotheses, giving now more, now less accurate demonstrations of them. All the physical sciences have need of some definite material (ὕλη) because they are always concerned with noses, eyes, flesh, bones, animals, plants, roots, bark, in short with material things, subject to movement. There even arises a physical science that is concerned with the soul, or rather, with a sort of soul (περὶ ψυχῆς ἐνίας), in so far as this is not without matter. Mathematics, like philosophy, studies, not things subject to movement, but motionless being; but it differs from philosophy in not excluding the matter in which their objects are as it were incorporated (ὡς ἐν ὕλῃ): the suppression of

matter is obtained in them by aphairesis or abstraction.[1] This divergence between philosophic and physical or mathematical procedure is the point upon which empiricism and mathematicism rely; but these, inferior here to Aristotle, deny the science of absolute being (*περὶ ὄντος ἁπλῶς*) and leave in existence only the second order of sciences, which deal with the particular and abstract. There is another important distinction in Aristotle, but to tell the truth it is impossible to say how far he connected it with the preceding distinction between philosophy and physics, with which it is substantially one. Aristotle knew two forms of universal: the universal of the *always* (*τοῦ ἀεί*) and that of the *for the most part* (*τοῦ ὡς ἐπὶ τὸ πολύ*).[2] He was well aware of the difference between the first, which is truly universal, and the second, which is so only in an approximate and improper manner; and he even asked himself if the *for the most part* alone existed and not also the *always*; but his interest was directed not so much to the comparative differences of the two series, as to the common character of universality which both of them asserted as against the individual and accidental. Science (he said) is occupied, not

The universals of the "always" and those of the "for the most part."

[1] *Metaphys.* E 1, p. 1025 b, 1026 a.

[2] *Metaphys.* vi. 1027 a.

with the accidental, but with the universal, whether it be eternal and necessary (*ἀναγκαῖον*) or only approximately universal (*ἐπὶ τὸ πολύ*).[1] Philosophy, physics and mathematics felt at this period that they had a common enemy in sensationalism and sophism, and they formed an alliance against this common enemy, rather than as happened later, dissipate their energies in intestinal welfare.

Controversies concerning Logic in the Middle Ages.

Without dwelling upon the later scepticism, mysticism and mythologism, which represented the dissolution of ancient philosophy and the germ of a new life (especially in Christian mythologism, which had absorbed elements of ancient philosophy and was accompanied by a very developed theology), we must pass on to note the progress which the logical problem made in the schools of the Middle Ages. To look upon mediæval philosophy (as many do) as a negligible episode, a mere detritus of ancient culture quite unconnected with the later spiritual activity, is now no longer possible. Certainly in the disputes of the nominalists and realists, the problem of transcendence and of immanence was neglected. It could not be solved on the presumptions of a philosophy which had at its side a theology, of

[1] *Anal. post.* i. ch. 30.

which it constituted itself the handmaiden. The Platonic transcendence was incurable in Christianity, and those who even to-day seek to purify Christianity from survivals of Greek thought, do not perceive that, in this purification effected by their philosophies of action and of immanence, they are destroying Christianity itself.[1]

Nominalism and realism.

But in those disputes, besides the question of the place that belongs to science in relation to religious faith, or to mundane science in relation to revealed and divine science, the question of the nature of the concept was also raised; that is to say, they continued the Platonic-Aristotelian enquiry into the doctrine of the concept in the second of the meanings that we have distinguished. But no true conclusion was reached in this enquiry. The conciliatory formula of the Arabic interpreters of Aristotle, accepted by Albertus Magnus and Thomas Aquinas, in which the universals were affirmed as existing *ante*, *in* and *post rem*, in so far as it is possible to confer upon it an exact meaning, was understood in a superficial manner, and therefore it has not unreasonably seemed too easy and too expeditious.[2] A dispute of this sort cannot be solved by summarizing

[1] See the writings of Gentile concerning De Wulf and La Berthonnière in the *Critica*, iii. pp. 203-21, iv. pp. 431-445.

[2] Prantl, *Gesch. d. Logik*, iii. pp. 182-3.

discordant opinions, as in the formula we have mentioned, or by fixing a mean, as in conceptualism. But the realists, bravely maintaining the truth of the philosophic universal, maintained the rights of rational thought and of philosophy; and the nominalists, on their part, asserting in contradiction to the former, the nominalist universal, prepared the modern theories of natural science. Realism produced philosophic thought of high importance, as in the so-called ontological argument of Anselm of Aosta, which (though through the myth of a personal God) asserts the unity of Essence and Existence, the reality of what is truly conceivable and conceived. Gaunilo, who confuted and satirized that concept, by employing the example of a "most perfect island," thinkable yet non-existent, seems an anticipation of Kant; at least of the Kant who employed the example of the hundred dollars to illustrate the same case —if it is not more accurate to say that Kant was, in that case, a late Gaunilo. Anselm replied (as Hegel did to Kant) that it was not a question of an island (or of a hundred dollars of something imaginable that is not at all a concept), but of the being than which it is impossible to think a greater and a more perfect (the true and proper concept). On the other hand, the nominalists,

who like Roscellinus maintained that the *universales substantiae* were *nonnisi flatus vocis*, performed the useful office of preventing the sciences of experience from being absorbed and lost in philosophy. In Roger Bacon we see clearly the connection of nominalism with naturalism. He considered individual facts, so-called external experience, in its immediacy, as the true and proper object of science. Concepts were for him a simple expedient, directed towards the mastery of the immense richness of the individual. "*Intellectus est debilis* (he said); *propter eam debilitatem magis conformatur rei debili, quae est universale, quam rei quae habet multum de esse, ut singulare.*"

Nominalism, mysticism and coincidence of opposites.

But the nominalists, *dialecticae haeretici* (as Anselm called them), were heretics only in the circle of the dialectic. The truth remained for them something beyond; the concept, the *secunda intentio*, was certainly something arbitrary and *ad placitum instituta*; it was "*forma artificialis tantum, quae per violentiam habet esse,*" but beyond it were always faith and revelation. God is the truth, and in God the ideas are real; hence Roger Bacon gave to inner light (as the positivists or neocritics of to-day give to feeling) a place beside sensible experience. Mysticism, being developed from mediæval philosophy, both from

one-sided realism and from one-sided nominalism, extends its hand at the dawn of the new Era to the philosophy of Cusanus, to scepticism, to *docta ignorantia*. This was not a mere negation; so much so that in it (though in a negative form and mixed with religion) there appears in outline nothing less than the theory of the *coincidence of opposites*, that is to say, the cradle of that modern logical movement, which was destined definitely to conquer transcendence. The coincidence of opposites is the germ of the dialectic, which unifies value and fact, ideal and real, what ought to be and what is. This important thought reappears in German mysticism; and (significantly for its future destinies) rings out upon the lips of Martin Luther, who declared that virtue coexists with its contrary, vice, hope with anxiety, faith with vacillation, indeed with temptation, gentleness with disdain, chastity with desire, pardon with sin; as in nature, heat coexists with cold, white with black, riches with poverty, health with disease; and that *peccatum manet et non manet, tollitur et non tollitur*, and that at the moment a man ceases to make himself better, he ceases to be good.[1] And before it became dominant

[1] For these references to writings of Luther, see F. J. Schmidt, *Zur Wiedergeburt des Idealismus*, Leipzig, 1908, pp. 44-6.

in Jacob Böhme it was stripped of its religious form and eloquently defended in Italy by Giordano Bruno.[1]

The Renaissance and naturalism. Bacon.

This realist, mystical and dialectical current of thought was destined to yield its best fruits some centuries later. For the time being, in the seventeenth century, and yet more in the century that followed, the victory seemed to rest with nominalism, that is to say, with naturalism. In Italy, Leonardo da Vinci laughed at theological and speculative disputes and celebrated, not the mind, but the *eye* of man, that is, the science of observation. The same tendency appeared in the anti-Aristotelians and naturalists, who placed the natural sciences above scholasticism. In England, the other Bacon, however slight his importance both as philosopher and naturalist, yet has much importance as the symptom and spokesman of the self-assertion of naturalism. In the *Novum Organum*, the universal of the *for the most part* claims its rights as against the universal of the necessary and eternal. He does not wish, however, to do away with the latter, but rather to complete it; the syllogism is insufficient, induction also is needed. Philosophy and theology are well where they are, but a

[1] See my Essay upon Hegel, ch. ii.

science of physics is also needed; philosophic induction, which goes at a leap to first causes, must be accompanied by a gradual induction (the only one that interests the naturalist), which connects particular facts by means of laws more and more general; final causes must be banished from the study of nature, and only efficient causes admitted. *Anticipationes naturae*, that is to say, the invasions of philosophism into the natural sciences, are to be prohibited. These utterances are far more discreet than those that have so often since been heard.

The ideal of exact science and the Cartesian philosophy.

By another school of this period, on the other hand, the pure concept was wrongly identified with the abstract concept. Thus speculative rationalism took the form of mathematical rationalism and the ideal of philosophy was confused with the ideal of *exact science.* This tendency is also to be found in Leonardo, who exalted "reason" alone, that is calculation, as outside of and sometimes superior to experience. Galileo expressed similar thoughts later. The Cartesian philosophy is animated with it, that is to say, the philosophy of Descartes and of his great followers, especially Spinoza and Leibnitz. Thus this is especially an intellectualist philosophy, full of empty excogitations and rigid

divisions, developed by a mechanical or by a teleological method, which always operated by means of mechanism. It is true that even under these improper forms, philosophic thought progressed. The consciousness of the inner unity of philosophy progressed with Descartes, that of the unity of the real by means of Spinoza's concept of substance, and that of spiritual activity by means of the dynamism of Leibnitz; but Logic remained as a whole the old scholastic logic. The purity of the concept was asserted at the expense of concreteness; thus the concept, in the Logic of those writers, is always something abstract, although its reality is so far recognized that it is thought possible to think with it the most real (the God of Descartes, the substance of Spinoza, the Monad of Leibnitz). The eighteenth century, mathematical, abstractionist, intellectualist, ratiocinative, anti-historical, illuminist, reformist, and finally Jacobin, is the legitimate issue of this Cartesian philosophy, which confuses the Logic of philosophy with the Logic of mathematics. France, which was the country of its birth and where it became most firmly rooted and most widely disseminated, owes to it, perhaps even more than to Scholasticism, the mental imprint which

it still bears and which the strong Germanic influence that has made itself felt there also in the last century has not sufficed to eradicate. It is only in our day that the country which is the type of the abstract intellect strives to become philosophically more concrete. It is now occupied with æstheticism or intuitionism, and, unless the movement is suffocated or dissipated, it may effect a true revolution in the traditional French spirit.

Adversaries of Cartesianism. Vico.

The opposition to abstractionism had no representatives in the seventeenth century and for a great part of the eighteenth, except among thinkers of but slight systematic powers, with whom it did not progress beyond the logical form of the presentiment and the literary form of the aphorism. In France, Blaise Pascal was one of these, with his anti-Cartesianism, his restriction of the value of mathematics, and his celebration of the reasons of the heart which reason does not know. In Germany there was Hamann, who possessed such a strong sense of tradition, of history, of language, of poetry and of myth, and finally of the truth contained in the principle of the *coincidence of opposites* which he had met with somewhere in Bruno. The Italian Giambattista Vico was the only great systematic

thinker to express opposition to abstractionism and Cartesianism. Prior to and more clearly than Hamann, he perceived the unity of philosophy and history, or as he called it, of *philosophy and philology*. He conceived thought as an *ideal history* of reality, immanent in the real history which occurs in time; he abolished the distinctions of the concept as separate species and substituted the notion of degrees or moments, which (as Schelling did after him) he called *ideal epochs*; he considered the abstractionist and mathematical century which he saw rising before him, as a period of philosophic decadence, and foretold the evil effects of Cartesian anti-historicism. (His presage was fulfilled.) In this way, he sketched a new Logic, very different from that of Aristotle or of Arnaud which was the most recent, a Logic in which he attempted to satisfy Plato and Bacon, Tacitus and Grotius, the idea and the fact. But if the other opponents of abstractionism had very little effect, because of their immaturity and want of system, Vico also was ineffectual, because he was born in Italy precisely at the time when Italy as a productive country was definitely issuing from the circle of European thought and was beginning passively to accept the more popular forms of foreign

thought. Finally, Naples, the little country of Vico, was then becoming encyclopædist and sensationalist, and did not really begin to know until a century later the remedy for such evils composed in anticipation by Vico.

Empiricist Logic and its dissolution— Locke, Berkeley and Hume.

The surpassing of the Logic of the abstract concept and the achievement of that of the concrete concept or pure concept or idea, was realized in other ways, primarily by a sort of reduction to the absurd of empiricist and mathematical Logic, in the scepticism which was its result. This reduction to the absurd, this final scepticism, is to be observed in the movement of English philosophy, beginning with Locke or even with Hobbes, to Hume. Locke, starting from perception as his presupposition, derived all ideas from experience, with the sole instrument of reflection; and rejecting innate ideas and looking upon others as more or less arbitrary, he preserved some objectivity to mathematical ideas alone, which relate to what are called primary qualities. Berkeley denies objectivity even to the primary qualities. All concepts, naturalist and mathematical alike, are for him abstract concepts and to that extent without truth. The only truth is the "idea," which means here nothing but sensation or the representation of the individual. His Logic is not

empiricist, because it is in no respect Logic. At the most it is an Æsthetic substituted for and given as Logic. It is true, notwithstanding his complete denial of universals—of empirical and abstract, no less than of philosophic, which he never even mentions—that he deludes himself into thinking that he has overcome scepticism; and it is true also that he laid the foundations of a spiritualist and voluntarist conception of reality, which in our opinion should be preserved and adopted by modern thought. But this proves only that his philosophy does not wholly agree with his Logic, and not that his Logic is not the complete denial of the concept and of thought. The logical consequence of Berkeley could not, then, be anything but the scepticism of David Hume, who shakes the very foundation upon which the whole of the science of nature rests, namely, the principle of causality.

Exact science and Kant. The concept of the category.

As the effect of this extreme scepticism, the surpassing of empiricist and abstractionist Logic had to be begun with the restoration of that Logic itself (because that which does not exist cannot be surpassed), that is to say, with the demonstration, against Hume, that the exact science of nature is possible. Such is the principal task of the *Critique of Pure Reason*,

which contains the Logic of the natural and mathematical sciences, thought no longer by an empiricist, but by a philosopher who has surpassed empiricism and recognized that the concepts of experience presuppose the human intellect, which originally constructed them. Leibnitz had already travelled this road, when in a polemic against Locke he maintained that reflection to which Locke appealed, referred back to the innate ideas: for if reflection (he said) is nothing but "*une attention à ce qui est en nous et les sens ne nous donnent point ce que nous portons déjà avec nous*," how can it ever be denied "*qu'il y est beaucoup d'inné en nous, puisque nous sommes, pour ainsi dire, innés à nous mêmes? Peut-on nier qu'il y ait en nous être, unité, substance, durée, changement, action, perception, plaisir et mille autres objets de nos idées intellectuelles?*[1] The *New Essays*, in which these and other similar themes were developed, remained for a time unedited, but appeared opportunely in 1765 to fecundate German thought, and acted upon Kant, together with English empiricism and scepticism, the latter giving the problem and the former almost an attempt at a solution. But the innate ideas of Leibnitz are profoundly trans-

[1] Preface to *Nouveaux Essais*.

formed in the Kantian concept of the *category*, which is the formal element and really exists only in the very act of judgment, which it effects. Mathematics are thus secured in their possession, no longer by means of the primary qualities of Locke, but because they arise from the *a priori* forms of intuition, space and time. The natural sciences are also secured, because the concepts of them are constituted by means of the categories of the intellect, on the data of experience. In other words, mathematical and natural science have value, in so far as they are a necessary product of the spirit.

The limits of science and Kantian scepticism.

But a limitation of value due also to Kant, accompanies this theoretic reinforcement of exact science. That science is necessary, because produced by the categories; but the categories cannot develop their activity except upon the data of experience; so that exact science is limited to experience, and whenever it makes the attempt to surpass it, it becomes involved in antinomies and paralogisms and gesticulates in the void. Science moves among phenomena and can never penetrate beyond them and attain to the "Thing in itself."

The limits of science and Jacobi.

It would seem from this that Kant was bound to end in a renovated nominalism and mysticism,

and indeed such is partly the case. Contemporaneously with him, Jacobi also observed the limit in which is enclosed the mechanical and determinist science of nature (the highest philosophic expression of which was then found in the *Ethic* of Spinoza), since it works with the principle of causation and is impotent, unless it wishes to commit suicide, to leave the finite which it describes in a causal series, and Jacobi concluded in favour of mysticism and of *feeling*, the organ of the Knowledge of God. Kant, like Jacobi, in his turn has recourse to the non-theoretic form of the spirit, to the practical reason and its postulates, to provide that certitude of God, of immortality, and of human freedom, which is not evident to the theoretic reason. But in Kant there are other positive elements which are not in Jacobi, and these elements, although not sufficiently elaborated by him and not harmonized with one another, confer upon his philosophy the value of a new Logic, more or less sketched. For he recognizes not only a theoretic, but also a practical reason, which cannot be called simply practical, if it in any way produce (although only under the title of postulates), knowledge (and knowledge of supreme importance). He recognises also an æsthetic judgment, which, although developed

without concepts, does not belong to the sphere of practical interests; and a teleological judgment, which is regulative and not constitutive, but not on this account arbitrary or without meaning. Finally, the very contradictions, in which the intellect becomes involved, when it wishes to apply the categories beyond experience, could not reasonably be considered by him to be mere errors, because they constitute serious problems, if the intellect becomes involved in them, not capriciously, but of *necessity*. All this presages the coming of a new Logic, which shall set in their places these scattered elements of truth and solve the contradictions.

The a priori synthesis.

But the Kantian philosophy also contains, in addition to these elements and these stimulations, the concept of the new Logic in the *a priori* synthesis. This synthesis is the unity of the necessary and the contingent, of concept and intuition, of thought and representation, and consequently is the pure concept, the *concrete universal.*

The intimate contradiction of Kant. Romantic principle and classical execution.

Kant was not aware of this; and instead of developing with a mind free from prejudice the thought of his genius, he also allowed himself to be vanquished by the abstractionism of his time and out of the logical and philosophical *a priori*

synthesis he made the more or less arbitrary *a priori* synthesis of the sciences. In this way, the apriority of the intuition led him, not to art, but to mathematics (transcendental Æsthetic)[1] the apriority of the intellect led him, not to Philosophy, but to Physics (abstract intellect): hence the impotence which afflicted that synthesis, when confronted with philosophic problems. When he discovered the *a priori* synthesis, Kant had laid his hand upon a profoundly *romantic* concept; but his treatment of it became afterwards *classicist* and *intellectualist*. The synthesis is the palpitating reality which makes itself and knows itself in the making: the Kantian philosophy makes it rigid again in the concepts of the sciences; and it is a philosophy in which the sense of life, of imagination, of individuality, of history, is almost as completely absent as in the great systems of the Cartesian period. Whoever is not aware of this intimate drama and fails to understand this contradiction; whoever, when confronted with the work of Kant, is not seized with the need, either of going forward or of going backward, has not reached the heart of that soul, the centre of that mind. The old philosophers who condemned

[1] See what is said on this point in my *Æsthetic*[3], Part II. Chap. VIII.

Kant as sceptical and as a corrupter of philosophy, and who confined themselves strictly to Wolfianism and to scholasticism, and the new who greeted him as a precursor and made of him a stepping-stone on which to mount higher,—these alone came truly into contact with Kant's philosophy. For in his case there are but two alternatives: abhorrence or attraction, loathing or love. In the midst of a battle one must flee or fight: to sit still and take one's ease is the attitude of the unconscious and the mad. Certainly it is better to fight than to flee, but it is better to flee than to sit inactive. He who flees, saves at least his own skin, or, to abandon metaphor, saves the old philosophy, which is still something; but the inactive man loses both life and glory, the old philosophy and the new.

Advance upon Kant: Fichte, Schelling, Hegel.

The new philosophy was that of the three great post-Kantians, Fichte, Schelling and Hegel. With Fichte, all trace of the thing in itself has disappeared and the dominating concept is that of the Ego, that is, of the Spirit, which creates the world by means of the transcendental imagination and recreates it in thought. In Schelling is found the concept of the Absolute, the unity of subject and object, which has, as its instrument, intellectual intuition. In Hegel,

there is this same concept, but it has itself as instrument, that is to say, it is truly logical. All three are Kantians, but all three (and especially the last two) are not simply Kantian. They employed elements which Kant ignored or employed timidly, and in particular the mystical tradition and the new tendencies of æsthetic and historical thought. Thus they pass beyond the abstractionism and intellectualism of the Kantian period, and inaugurate the nineteenth century. They are connected ideally with Vico (Hamann was the little German Vico), and they enrich him with the thoughts of Kant.

The Logic of Hegel. The concrete concept or Idea.

Neglecting the particular differences between these thinkers and the genetic process by which we pass from one to the other, and taking the result of that speculative movement in its most mature form, which is the philosophy of Hegel, we see in it (like a new, securely established society after the frequent changes of a revolution) the establishment of the new doctrine of the concept. Kant's unconsciousness of the consequences of the *a priori* synthesis had been such that he had not hesitated to affirm that Logic, since the time of Aristotle, had possessed so just and secure a form as not to need to take one single step backward, and to be unable to take

one forward.[1] But Hegel insisted that this was rather a sign that that science demanded complete re-elaboration, since an application of two thousand years should have endowed the spirit with a more lofty consciousness of its own thought and of its own essential nature.[2] What was the concept for Hegel? It was not that of the empirical sciences, which consists in a simple general representation and therefore always in something finite; it is barbaric to give the name concepts to intellectual formations, like "blue," "house," or "animal." Nor was it the mathematical concept, which is an arbitrary construction. All the logical rationality that there is in mathematics is what is called irrational. These so-called concepts are the products of the abstract intellect; the true concept is the product of the concrete intellect, or reason. It has therefore nothing to do with the immediate knowledge of the sentimentalists and of the mystics, and with the intuition of the æstheticists; such formulæ as these express the necessity for the concept, but give only a negative determination of it. They assert what it is not in relation to the empirical sciences and then misstate what it is in philosophy. For the

[1] *Krit. d. rein. Vern.* ed. Kirchmann, pp. 22–3.
[2] *Wiss. d. Logik*, i. p. 35; cfr. p. 19.

rest, the shortcomings of the abstract intellect, generating the pure void or *thing in itself* (which far from being, as Kant believed, unknowable, is indeed the best known thing of all, the abstraction from everything and from thought itself) prepare the environment for the phantasms and caprices of mysticism and intuitionism. The true concept is the *idea*, and the idea is the absolute unity of the concept and of its objectivity. This definition has sometimes seemed whimsical, sometimes most obscure; yet it presents nothing but the elaboration in a more rigorous form of the Kantian *a priori* synthesis, so that these two terms could without further difficulty be regarded as equivalent; the *a priori* logical synthesis is the Idea and the Idea is the *a priori* logical synthesis. If Hegel has not been understood, that is due to the fact that Kant himself has not been understood. Those who assert that they understand what Kant meant to say, but not what Hegel meant to say, deceive themselves. For Kant and Hegel say the same thing, though the latter says it with greater consciousness and clearness, that is to say, better.[1]

Identity of the Hegelian Idea with the Kantian a priori synthesis.

[1] Kuno Fischer in his *Logic*, when expounding the thought of Hegel, clearly distinguishes the empirical concepts from the pure concepts, and notes that those which are pure or philosophical, are, in the spirit, the basis and presupposition of the others. "These others, the empirical, are formed from

The Idea and the Antinomies. The Dialectic.

The idea, the concrete universal, the pure concept, rebels against the mechanical divisions employed for the empirical concepts. For it has its own division, its own proper and intimate rhythm, by means of which it divides and unifies, and unifies itself when dividing and divides itself when unifying. The concept thinks reality, which is not immobile but in motion, not abstract being, but becoming; and therefore in it distinctions are generated one from another and oppositions reconciled. Hegel not only gives the true meaning of the Kantian *a priori* synthesis, recognizing it as the concrete concept, but replaces the antinomies in its bosom. The contradiction is not due to the limitation of thought before a non-contradictory reality, which thought is unable to attain; it is the character

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single representations or intuitions, by uniting homogeneous characteristics and separating them from the heterogeneous; and thus arise general representations, concepts of classes": empirical, because of their empirical origin, and representative, because they represent entire classes of single objects, that is, are generalized representations. But at the base of each of these are found judgments or syntheses, which contain non-empirical and non-representable elements, elements which are *a priori* and only thinkable. These are the true concepts, the first thoughts in the ideal order, without which nothing can be thought (*Logik*², i. sect. i. § 3). The difference between these pure concepts or categories and empirical concepts or categories is not quantitative, but qualitative: the pure concepts are not the most general, the broadest classes; they do not represent phenomena, but connections and relations; they can be compared to the signs (+, −, ×, :, $\sqrt{\ }$, etc.) of arithmetical operations; they are not obtainable by abstraction, indeed it is by means of them that all abstractions are affected (*loc. cit.* §§ 5–6).

of reality itself, which contradicts itself in itself, and is opposition, *coincidentia oppositorum*, the synthesis of opposites, or dialectic. A new doctrine of opposites and the outlines of a new doctrine of distinction accompanies the new doctrine of the pure concept. In this philosophy is truly summarized all the previous history of thought. The concept of Socrates has acquired the reality of the idea of Plato, the concreteness of the substance of Aristotle, the unity-in-opposition of Cusanus and Bruno, the Vichian reconciliation of philosophy and philology, the unity-in-distinction of the Kantian synthesis and the æsthetic suppleness of Schelling's intellectual intuition.

The lacunæ and errors of the Hegelian Logic. Their consequences.

Nevertheless, the history of thought does not stop at Hegel. In Hegel himself are found the points to which later history must attach itself; the lacunæ which he left and the errors into which he fell. The fundamental error was the abuse of the dialectic method, which originated for the philosophic solution of the problem of opposites, but was extended by Hegel to the distinct concepts, so that he interpreted even the Kantian synthesis itself as nothing but the unity of opposites. Hence arises his incapacity to attribute their true value and function to the

alogical forms of the spirit, such as art, and to the atheoretic, such as the natural sciences and mathematics; and even to logical thought itself, which, violating the laws of the synthesis, ended by imposing itself upon history and the natural sciences, attempting to resolve them into itself by dialectizing them, as the philosophy of history and the philosophy of nature. To this, therefore, is due the philosophism or panlogism which is characteristic of the system. This error was assisted by Hegel's want of clearness as to the nature of the empirical sciences. For him as for Kant, these remained *sciences*, that is to say, knowledge of truth, although imperfect knowledge of it. They therefore constituted even for him the material or the first step in philosophy. It is true that he also had other more acute and profound thoughts upon this subject. Amid a number of incidental observations, he emphasized the arbitrariness (*Willkurlichkeit*), with which those forms are affected; and this is tantamount to declaring their practical and atheoretic character. But instead of respecting this character, he decided upon surpassing it by means of a philosophic transformation of those sciences, which was not so much their death as pretended philosophies (a most true conclusion),

as their elevation to the rank of particular philosophies by means of a mixture of empirical concepts and pure concepts, of abstract intellect and of reason. The erroneous tendency found nourishment and took concrete form in the idea of a Philosophy of nature, which Schelling had obtained, partly from Kant himself and partly had found in his own at first latent and then manifest theosophism. In this way, the system of Hegel became divided into three parts, a Logic-metaphysic, a Philosophy of nature and a Philosophy of Spirit, whereas it should on the contrary have unified Logic and the Philosophy of Spirit, and expelled the Philosophy of nature. By its internal dialectic, panlogism or philosophism was converted, even in Hegel himself, and still more among his disciples, into mythologism, and from the system of the Idea and of absolute immanence, because of the imperfections which they contained, there reappeared theism and transcendence (the Hegelian right wing).[1]

Contemporaries of Hegel: Herbart, Schleiermacher, and others.

It would be vain to seek the correction of Hegel among those thinkers that were his contemporaries, for they were all, though in various degrees, inferior to him. None of them had

[1] See my essay, *What is Living and what is Dead of the Philosophy of Hegel*, for the criticism here briefly summarized.

attained, through Kant, to the height attained by Hegel. Dwelling on a lower level, they could certainly refuse to recognize him and vituperate him, but they could never collaborate with and beyond him, in the progress of truth. Herbart held those concepts to which the particular sciences give rise to be contradictory, but he claimed to surpass the contradiction by means of an elaboration of the concepts (*Bearbeitung der Begriffe*), conducted in the very method of the old Logic, that is, of the Logic of the empirical sciences. Schleiermacher renounced the attempt to reach the unity of the speculative and the empirical, of Ethic and Physics, that is, the realization of the pure idea of knowledge; and he substituted for that ideal, which for him was unattainable, *criticism*, a form of worldly wisdom, that is to say, of philosophy (*Weltweisheit*) which gave access to theology and to religious feeling.[1] Schopenhauer accepted the distinction between concept and idea, the first abstract and artificial, the second concrete and real; but so slight was his understanding of the idea (which he called the Platonic idea) that he confused it with the concept of natural species,[2] that is to say,

[1] *Dialektik*, ed. Halpern, pp. 203-245.
[2] *Werke*, ed. Grisebach, ii. chap. 39.

precisely with one of the most artificial and arbitrary of empirical concepts. Finally, Schelling, who had been a precursor of Hegel in his youth and had collaborated with him, not only failed to improve his logic of the intuition in his second philosophical period, but he abandoned even this embryonic form of the concrete concept, and gave himself over as a prey to the will and to irrationality. In his positive philosophy the old adversary of Jacobi made a bad combination of the alogism of Jacobi with the Hegelian idea of development and with mythologism, as in metaphysic he had anticipated the blind will of Schopenhauer.[1]

Later positivism and psychologism.

The ensuing period, both in Germany and in the whole of Europe, had little philosophical interest. It was marked by the reappearance of a form of naturalism and of Empiricism, in part

[1] The movement of Italian thought in the first decades of the nineteenth century was rather a progress of national philosophic culture than a factor in the general history of philosophy. In this last respect, the rôle of Italy was for the time being ended; though it did not end in the seventeenth century with Campanella and Galileo (as foreign historians and the Italians who copy them believe). It ended magnificently in the first half of the eighteenth century with Vico, the last representative of the Renaissance and the first of Romanticism. The influence of German philosophy continued to manifest itself in Italy in the nineteenth century, at first almost entirely through French literature, then directly. It can be studied in the three principal thinkers of the first half of the century, Galuppi, Rosmini, and Gioberti. The first began from the Scottish school, and while attacking Kant, he absorbed not a few of his principles. The second, also in a polemical sense and in a Catholic wrapping, can be called the Italian Kant. The third, who had always only the slightest

justified by the abuse of the dialectic, which had sometimes, in the hands of Hegel's disciples, seemed altogether mad. But this recrudescence was in every way very poor in thought and inadequate to previous history. With this Empiricism is associated the deplorable *Logic* of John Stuart Mill, one of those books which do least honour to the human spirit. That less than mediocre reasoner did not even succeed in producing a Logic of the natural sciences. He became involved in contradictions and tautologies, talking, for instance, of experience, which criticises itself and imposes its own limits upon itself, and of the principle of causality, as a law which affirms the existence of a law that there shall be a law. Still less had he any notion of what it is to philosophize, maintaining that in order to make progress in the moral and philosophical sciences it is necessary to apply to them the method of the physical sciences. Nothing is

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consciousness of history, assumed the same position as Schelling and Hegel. To have attained (between 1850 and 1860) to such historical consciousness is the merit of Bertrando Spaventa (see especially his book, *La filosofia italiana nelle sue relazioni con la filosofia europea*, new edition, by G. Gentile, Bari, Laterza, 1908), who represented Hegelianism in Italy in a very cautious and critical form. But there was no true surpassing of Hegelianism either by his disciples or by his adversaries, and some original thought is to be found only among non-professional philosophers, particularly in Æsthetic, with Francesco de Sanctis (cf. *Estetica*, part ii. chap. 15).

more puerile than his nominalism, which gives language a logical character, and then pretends that language must be logically reformed. Logical science was altogether lost in the evolutionism or physiologism of Spencer, and in the psychologism which had and still has many followers in Germany, in France, and in England, not less than in Italy. The state in which the Logic of philosophy is found in such an environment can be inferred from the fact that even mathematical Logic fared ill there, since there have not been wanting those who have dared to conceive a *psychology of arithmetic*. Finally, as a healthy corrective of psychologism, the danger of which to the old Logic had already been noted by Kant,[1] there came the revival of the Aristotelian, and even of the scholastic Logic, in which there yet lived, though in erroneous forms, the idea of the universal which had been discovered by the Greek philosophers.

Eclectics. Lotze.

Other thinkers have not abandoned all contact with classical German philosophy; but, in comparison with the thoughts of Kant and of Kant's great pupils, they seem like children. They try to lift the weapons of the Titans, and either they do not move them at all or they let them fall

[1] *Krit. d. rein. Vernunft, loc. cit.*

from their hands, wounding themselves with them, but failing to grip them. The thoughts of Schelling and of Hegel indeed were discredited, but not touched; and those of Kant were touched, but ill-treated. In the most esteemed Logics of this description, such as those of Sigwart and of Wundt, the capital distinction between pure concepts and representative concepts, between *universalia* and *generalia*, has no prominence at all. Sigwart is obliged to complete the knowledge obtained from naturalistic and mathematical procedure by faith and by a gradual elevation to the idea of God. Wundt, who does not attribute to philosophy a method which is proper to it and different from that of the other forms of knowledge, conceives the final result of metaphysical thought as the position of a perpetual hypothesis. In the Logic of Lotze, who combated Hegelianism and revived transcendentalism and theism, there is just a luminous streak, a faint trace, of the idealist philosophy. Lotze understands that it is impossible to form (empirical) concepts by simply cancelling the varying parts of representations and preserving the constant parts, and recognizes that the formation of concepts presupposes the concept: the universal is made with the universal. He strives to issue from

this circle by positing a *primary* universal, not formed by the method of the others, but such that thought finds it in itself. This primary universal has nothing particular and representative; and only by means of it is it possible to combine heterogeneous and to differentiate homogeneous elements, and to form the ideas of size, of more or less, of one and of many and such like, with which the *second* universals of the synthesis are afterwards constructed.[1]

New gnoseology of Science. The Economic theory of the scientific concept.

While students of philosophy, although manifesting some doubt and dissatisfaction, allowed themselves to be intimidated by naturalism (dazzled, like the public, with technical applications, or confounded by the applause of the public), a tendency has become more and more accentuated during the last decades, which seems to us to offer great assistance to Logic and philosophy in general, if it is understood how to adapt it to its true end. It has not had any single centre of diffusion, but has arisen, almost contemporaneously, in several places, becoming at once diffused everywhere, like something that has happened at the right time. Several of its founders and promoters are mathematicians, physicists, and naturalists. From the very fact

[1] *Logik*, p. 42 *sqq.*

of their having begun to reflect upon their activity, these men have certainly ceased to be mere specialists, notwithstanding their protests to the contrary. Yet they obtain considerable strength from their specialism, finding in it a guide and a curb to prevent their losing sight in their gnoseological enquiry of the actual procedure of naturalistic constructions, which are its origin. The formula of this tendency is the recognition of the *practical or economic* character of the mathematical, physical, and natural sciences.

Avenarius, Mach.

The empirocriticism of Avenarius considers science to be a simple description of the forms of experience, and conceptual procedure to be the instrument that alters pure and primitive experience (pure intuition or pure perception) for the purpose of simplifying it. Ernest Mach has developed and popularized these views, for as a student of mechanics he had reached the same conclusions by his own path and in his own way. The physical sciences (he says), not less than zoology and botany, have as their sole foundation the description of natural facts in which there are never identical cases. Identical cases are created by means of the schematic imitation that we make of reality; and here too

lies the origin of the mutual dependence that appears in the character of facts. To this therefore he restricts the significance of the principle of causality, for which (in order to avoid fancifulness and mythologicism) it would be opportune to substitute the concept of *function*. Bodies or things are abbreviated intellectual *symbols* of groups of sensations; symbols, that is to say, which have no existence outside our intellect. They are cards, like those which dealers attach to boxes and which have no value except in so far as there are goods of value inside the box. In this economic schematicism lies the strength, but also the weakness, of science; for in the presentation of facts science always sacrifices something of their individuality and real appearance, and does not seek exactness in another way save when obliged to do so, by the requirements of a definite moment. Hence the incongruity between experience and science. Since they are developed upon parallel lines, they can reduce to some extent the interval that separates them, but they can never annul it by becoming coincident with one another.[1]

Rickert, in his book on the *Limits of the*

[1] See, among other books, *L'Analisi delle sensazioni*, Italian translation Turin, Bocca; 1903.

Naturalistic Concepts, maintains similar ideas, though with different cultural assumptions. The concept, which is the result of the labour of the sciences, is nothing but a means to a scientific end. The world of bodies and of souls is infinite in space and time. It is not possible to represent it in every individual part, by reason of its variety, which is not only extensive but also intensive: intuition is inexhaustible. The naturalistic concept is directed to surpassing this infinity of intuitions. It effects this by determining its own extension and comprehension, and by formulating its being in a series of judgments. Thus, in order to conquer intuition altogether, the natural sciences tend to substitute for concepts of *things* concepts of *relations* free from all intuitive elements. But the ultimate concept must always of necessity be a concept of things (though of things *sui generis*, immutable, indivisible, perfectly equal among themselves, expressible in negative judgments); and besides, they find everywhere insuperable barriers in the historical or descriptive element, which surrounds them all and is ineliminable. This naturalistic procedure can be applied and is indeed applied, not only to the science of bodies, but also to that of souls, to psychology and sociology; and

Rickert opportunely insists (as did Hegel in his time) upon the possibility of empirical sciences of what is called the spiritual world; or (as he says) the word "nature," as used in this connection, means not a reality, but a particular point of view from which reality is observed, in order to reach the end of conceptual simplification.[1]

Bergson and the new French philosophy.

In France, the same ideas or very similar are represented by a group of thinkers, who are called variously philosophers of contingency, of liberty, of intuition, or of action. Bergson, who is the chief of them, looks upon the concepts of the natural sciences in the same way as Mach, as *symboles* and *étiquettes*. Besides the extremely apposite applications that he has made of this principle to the analysis of time, of duration, of space, of movement, of liberty, of evolution, he has also the great merit of having broken his country's traditions of intellectualism and abstractionism, of giving to France for the first time that lively consciousness of the intuition, which she has always lacked, and of shaking her excessive reliance upon clear distinctions, upon well-turned concepts, upon classes, formulæ, and reasonings

[1] *Grenzen d. naturwissensch. Begriffsbildung*, Freiburg i. B, 1896–1902, chaps. 1-3.

that proceed in a straight line, but run upon the surface of reality.[1]

Le Roy, one of the followers of Bergson, has set himself to demonstrate, with many examples, that scientific laws only become rigorous when they are changed into conventions and depend upon vicious circles. The course of events is habitual and regular (if you like to say so), but it is not at all necessary. The great security of astronomical previsions is commonly praised; but that security is not always such in actual fact ("*il y a des comètes qui ne reviennent pas*"), and in any case it is always approximate. The rigorous necessity of which the natural sciences boast, is not known, but is rather postulated, and this postulation has merely the practical object of dominating single facts and of communicating with our neighbours ("*parler le monde*"). The law of gravity holds, but only when external forces do not disturb it. In this way it is well understood that it always holds. The conservation of energy avails only in closed systems; but closed systems are just those in which energy is conserved. A body left to itself persists in the state of repose; but this law is nothing but the definition of a body

Le Roy and others.

[1] See above, p. 528.

left to itself, and so on.[1] Poincaré boldly affirms the conventional character of the mathematical and physical sciences, as do Milhaud and several others. They have deduced it as a consequence of the impression aroused by the theories of higher geometry, which has contributed more or less successfully towards revealing the practical character of mathematics, which was formerly held to be the foundation or model of truth and certainty.

Reattachment to romantic ideas and advance made upon them.

All those criticisms directed against the sciences do not sound new to the ears of those acquainted with the criticisms of Jacobi, of Schelling, of Novalis, and of other romantics, and particularly with Hegel's marvellous criticism of the abstract (that is, empirical and mathematical) intellect. This runs through all his books, from the *Phenomenology of the Spirit* to the *Science of Logic*, and is enriched with examples in the observations to the paragraphs of the *Philosophy of Nature*. But if compared with that of Hegel, they are at the disadvantage of not being based upon powerful philosophical thought; they have, on the other hand, this superiority: that they do not present the characteristics observed in the sciences as errors which

[1] See his articles in the *Revue de métaphys. et de morale*, vols. vii. viii. xi.

must be corrected, but define them as physiological, necessary, uncensurable characteristics, derived from the very function of the sciences, which is not theoretic, but practical and economic. In this way there is posited one of the premisses that are necessary for preventing the mixture of the economic method with the method of truth, of empirical and abstract concepts with pure theoretic forms, and thus for making impossible that speculative hybridism, which is expressed in philosophies of history and of nature, and which fashions an abstract reason to work out a dialectic of the naturalistic concepts, and even of the representations of history. And with the prevention of this error there is also prepared a more exact idea of the relation between pseudoconcepts and concepts and a better constitution of philosophic Logic.

Philosophy of pure experience, of intuition, of action, etc.; and its insufficiency.

But in order that this result should be obtained, the idea of the philosophic universal must be reawakened and strengthened, in conformity with its most perfect elaboration in the history of thought, at the hands of Hegel. The critics of the sciences are at present far from this mark. The term that is distinct from the empirical and abstract concepts, the knowledge of reality which is not falsified by practical ends and discovered

beneath labels and formulæ, is supplied, not by the pure concept, by reality thought in its concreteness, by philosophy which is history, but by pure sensation or intuition. Both Avenarius and Mach appeal to pure and primitive experience, that is, to experience free of thought and anterior to it. Bergson, with an artistic talent that is wanting to the two Germans, but following the same path, has proclaimed a new metaphysic, which proceeds in an opposite sense to that of symbolical knowledge and of generalizing and abstracting experience. He has defined the metaphysic which he desires, as a science *qui prétend se passer des symboles*, and therefore as "*Science de l'expérience intégrale.*" This metaphysic would be the opposite of the Kantian ideal, of the mathematical universal, of the Platonism of the concepts, and would be founded upon intuition, the sole organ of the Absolute: "*est relative la connaissance symbolique par concepts pré-existants qui va du fixe au mouvant, mais non pas la connaissance intuitive, qui s'installe dans le mouvement et adopte la vie même des choses. Cette intuition atteint l'absolu.*[1] The conclusion is æstheticism, and sometimes something even

[1] "Introduction à la Metaphysique," in the *Revue de métaphys. et de mor.* xi. pp. 1-36.

less than æstheticism, namely mysticism, or *action* substituted for the concept. The criticism of the sciences thereby comes to mean the negation of knowledge and of truth. Hence the protest of Poincaré[1] against Le Roy, justified in its motive, but ineffective, because based upon the presuppositions of mathematics and physics. In others again, it becomes intermingled with the turbid waters of pragmatism, which is a little of everything, but, above all, chatter and emptiness.

The theory of values.

Finally, another of the thinkers that we have mentioned, Rickert (following Windelband), wishes to integrate naturalistic and abstract knowledge with the historical knowledge of individual reality. Being reasonably diffident as to the possibility of a metaphysic as an "experimental science" (such as Zeller was among the first to desire), he moves towards a general theory of values. This indeed is the form (imperfect because stained with transcendence) by means of which many in our day are approaching a philosophy as the science of the spirit (or of immanent value). But in the hands of Windelband and Rickert it is understood as a primacy of the practical reason, which is taken to govern the double series of the world of the sciences and the world of history. This

[1] *La Valeur de la science*, Paris, 1904.

doubtless represents progress, as compared with empiricism and positivism; but not as compared with the Hegelian Logic of the pure concept, which included in itself what is and what ought to be.

Such, briefly stated, is the present state of logical doctrines concerning the Concept.

III

THE THEORY OF THE INDIVIDUAL JUDGMENT

Secular neglect of the theory of history.

THE theory of the individual judgment and therefore of historical thought, has been the least elaborated of all logical theories in the course of philosophic history. It is a very true and profound remark that the historical sense is a modern thing, and that the nineteenth century is the first great century of historical thinking. Of course, since history has always been made and individual judgments pronounced, theoretic observations upon historical judgments have not been altogether wanting in the past. The spirit is, as we know, the whole spirit at every instant, and in this respect nothing is ever new under the sun, indeed, nothing is new, either before or after the sun.[1] But history, and in particular, the theory of history, did not formerly arouse interest nor attract attention, nor was its importance felt,

[1] See my observations concerning the perpetuity of historical criticism in *Critica*, vi. pp. 383-84.

nor was it the object of anxious and wide investigations to the degree witnessed in the nineteenth century and in our times, when the consciousness of immanence triumphs more and more—and immanence means history.

Græco-Roman world's ideas of history.

Transcendence, then, which has for centuries been more or less dominant, supplies the reason why the study of the individual and the theory of history were neglected. In Greek philosophy, individual judgments were either despised, as in Platonism, or superseded by and confused with logical judgments of the universal, as in Aristotle. In the *Poetics*[1] the character of history did not escape him. Differing from science (which was directed to the universal) and from poetry (which was directed to the possible), it expresses things that have happened in their individuality, τὰ γενόμενα (what Alcibiades did and experienced). But in the *Organon*, although he distinguished between the universal (τὰ καθόλου) and the individual (τὰ καθ' ἕκαστον), between man and Callias,[2] he made no use of the distinction, and divided judgments into universal, particular and indefinite. The theory of history was not raised to the rank of philosophic treatment in antiquity, like the other forms of knowledge, and especially philo-

[1] *Poetics*, chap. 8.

[2] *Anal. pr.* i. chap. 27.

sophy, mathematics and poetry. What mark the ancients have left upon the argument is limited to incidental observations, and some altogether empirical remarks here and there upon the method of writing history. They were wont to assign extrinsic ends to it, such as utility and advice upon the conduct of life. Such utterances of good common sense as that of Quintilian, to the effect that history is written *ad narrandum, non ad demonstrandum*, do not possess great philosophic weight. Nor had the rules of the rhetoricians philosophic value, such as that of Dionysus of Halicarnassus, that historical narrative, without becoming quite poetical, should be somewhat more elevated in tone than ordinary discourse; or that of Cicero, who demanded for historical style *verba ferme poëtarum*, "perhaps" (wrote Vico, making the rhetorical rule profound) "in order that historians might be maintained in their most ancient possession, since, as has been demonstrated in the *Scienza nuova*, the first historians of the nations were the first poets."[1] More important, on the other hand, are the demands (as expressed especially by Polybius) of what is indispensable to history. Besides the element of fact, there is needful (Polybius observed)

[1] *Works*, ed. Ferrari.

knowledge of the nature of the things of which the happenings are portrayed, of military art for military things, of politics for things political. History is written, not from books, as is the way with compilers and men of letters, but from original documents, by visiting the places where it has occurred and by penetrating it with experience and with thought.[1]

The theory of history in mediæval and modern philosophy

The abstractionist and anti-historical character of the Aristotelian Logic had an injurious effect in the schools, though, on the other hand, it allied itself well with the persistent transcendentalism. Certainly, just as in the Middle Ages appeared reflections upon history, so there could be no avoiding the distinction between what was known *logice* and what was known *historice*, or, as Leibnitz afterwards formulated the distinction, between *propositions de raison* and *propositions de fait*. But these latter were always regarded with a compassionate eye, as a sort of uncertain and inferior truth. The ideal of exact science would have been to absorb truths of fact in truths of reason, and to resolve them all into a philosophy, or rather into a universal mathematics. Nor did the empiricists succeed in increasing their credit.

[1] See (in particular for Polybius) E. Pais, *Della storiografia della filosofia della storia presso i Greci*, Livorno, 1889.

These certainly paid particular attention to facts (hence the polemic of the Anti-Aristotelians and the origin of the new instrument of observation and induction). But by weakening the consciousness of the concrete universal they also weakened that of the concrete individual, and therefore presented the latter in the mutilated form of species and genera, of types and classes. Bacon, had he done nothing else, at any rate assigned a place to history in his classification of knowledge, which was divided, as we know, according to the three faculties (memory, imagination and reason), into History, Poetry and Philosophy. He passed in review the two great classes of history, natural and civil (the first of which was either narrative or inductive, the second more variously subdivided); thus he even pointed out the kinds of history that were desirable, but of which no conspicuous examples were yet extant, such as literary history.[1] Hobbes, on the other hand, having distinguished the two species of cognition, one of reason and the other of fact, "altera facti, et est cognitio propria testium, cujus conscriptio est historia," and having subdivided this into natural and civil, "*neutra*" (he added, that is to say neither the natural nor the civil) "*pertinet ad*

[1] *De dign. et augm.* i. ii. chaps. 1-2.

institutum nostrum," which was concerned only with the *cognitio consequentiarum*, that is to say, science and philosophy.[1] Locke is not less anti-historical than Descartes and Spinoza, and even Leibnitz, who was very learned, did not recognize the autonomy of historical work, and continued to consider it as directed towards utilitarian and moral ends.

Treatises on historical art in the Renaissance.

Reflections upon history, suggested rather by the professional needs of historians than by a need for systematization and a profound philosophy, continued on their way, almost apart from the philosophy of the time. From the Renaissance onwards, treatises on historical art were multiplied at the hands of Robortelli, Atanagi, Riccoboni, Foglietta, Beni, Mascardi, and of many others, even of non-Italians; but their discussions usually centred upon elocution, upon the use of ornament and of digressions, upon arguments worthy of history, and the like. Among these writers of treatises we must note (here as well as in the history of Poetics and of Rhetoric) Francesco Patrizio or Patrizzi (1560), for his ideas, sometimes acute, sometimes incoherent and extravagant. Overcoming one of the prejudices of empiricism, he justly wished

[1] *De homine*, chap. 9.

that the concept of history should not be limited to military enterprises and political negotiations alone, and that it should be extended to all the doings of men. With a like superiority to empirical views, he found historical representation not only in words, but also in painting and sculpture—(our times, so fruitful of histories graphically illustrated, should admit that he was to some extent right), and he did not accept chronological limits. He also insisted upon the mode of testing historical truth and upon the degree of credibility of witnesses. But he became extravagant, when he admitted a history of the future, calling the prophets as witnesses, and incoherent, when he both denied and affirmed the moral end of history.[1]

Treatises upon method.

Another form of empiricism, certainly more important, the methodological, which dealt with the canons and criteria to be borne in mind in making historical researches, accompanied the often rhetorical empiricism of writers of treatises. The reference to the duties of the historian in one place in Cicero was repeated and commented upon by all. But this treatment became gradually more wide, as we see especially in

[1] E. Maffei, *I trattati dell' arte storica del Rinascimento fino al secolo XVII*, Napoli, 1897.

the work of Vossius, *Ars historica sive de histôria et historiae natura, historiaeque scribendae praeceptis commentatio* (1623). The term "Historic" dates from this book and is formed on the analogy of Logic, Poetic, Rhetoric, etc., and applied to the theory or Logic of history. Gervinus (1837) and Droysen (1858) tried to bring this term again into vogue. The methodological treatment of historical research was more widely developed in the scholastic manuals of Logic of the sixteenth and seventeenth centuries, such as the *Logica seu ars ratiocinandi* of Leclerc (1692).[1] With these canons arising in the field of research and historical criticism, we may opportunely compare those concerning the mode of valuing and weighing evidence, which were gradually unified in juridical literature. Methodological treatment has also progressed in our times, in manuals such as those of Droysen, of Bernheim, of Langlois-Seignobos; but the general tendency of these works (as is also evident from their apparatus in heuristic, in criticism, in comprehension and in exposition) remains and must remain altogether empirical.

The first philosopher who gave to History

[1] G. Gentile, "Contribution à l'histoire de la méthode historique," in the *Revue de synthèse historique*, v. pp. 129-152.

an importance equal to Philosophy was Vico, with his already-mentioned union of philosophy and philology, of *truth* and *certainty*, and with the example that he offered of a philosophic *system*, which is also a *history* of the human race: an "*eternal ideal* history, upon which the histories of nations run in *time*." For this reason (not less than from his strong consciousness of the difference in character between the metaphysical concept and mathematical abstraction) Vico was an Anti-Cartesian. He stands between the seventeenth and eighteenth centuries as the opposer of the past and of the future, or of the nearest past and the nearest future. Indeed, there is even in Vico a trace of that vice which arises from a too indiscriminate identification of philosophy and history, which certainly constitute an identity, but an identity which is a synthesis and therefore a distinction. Hence, when no account is taken of this, the substantial truth affirmed loses its balance in philosophism and mythologism. The real epochs of Vico are too philosophic and have in them something forced; the ideal epochs are too historical and have in them something of exuberance and of contingency. The real epochs are not exempt from philosophistic caprices; the ideal sometimes

The theory of history and G. B. Vico.

become converted into a mythology (though full of profound meanings). For this reason, it has been possible now to praise, now to blame him for having invented the *Philosophy of history*. There is indeed in him, here and there, some hint of a philosophy of history *sensu deteriori*, but above all he is the great philosopher and the great historian.

The anti-historicism of the eighteenth century and Kant.

As the eighteenth century did not really know the concept of philosophy, so was it ignorant of that of history: its anti-historicism has become proverbial. There appeared at this time some celebrated theoretic manifestations of historical scepticism, of the negation of history, which seemed, as before to Sextus Empiricus, a thing without art and without method (ἄτεχνον . . . καὶ ἐκ τῆς ἀμεθόδου ὕλης τυγχάνουσαν). The book of Melchior Delfico, *Pensieri sull' Istoria e sull' incertezza ed inutilità della medesima* (1808), is one of the last manifestations of this sort. But all the thinkers of that time were of this opinion; even Kant, in whose wide culture were certainly two lacunæ—artistic and historical. And if in the course of elaborating his system he was led by logical necessity to meditate upon art, or rather upon beauty, he never paid serious attention to the problem of history.

Concealed historical value of the a priori synthesis.

Yet Kant is the true, though unconscious creator of the new Logic of history. To him belongs the merit, not only of having shown the importance of the historical judgment, but also of having given the formula of the identity of philosophy and history in the *a priori* synthesis. The logical revolution effected by Kant consists in this: that he perceives and proclaims that to know is not to think the concept abstractly, but to think the concept in the intuition, and that consequently to think is to *judge*. The theory of the judgment takes the place of that of the concept and is truly the theory of the concept, in so far as it becomes concrete. What does it matter that he is not aware of all this and that instead of referring the logical *a priori* synthesis to history, he refers it to the sciences, constituting it an instrument not of history, but of the sciences; and that instead of exhausting knowledge in the *a priori* synthesis, he leaves outside of it true knowledge as an unattainable, or theoretically unattainable ideal? What does it matter that when confronted with the problem of the judgment of existence, he solves it like Gaunilo and withdraws existence from thought, removing from it the character of predicate and of concept and making of it a position or an imposition *ab extra*?

What does it matter that his history is without historical developments and wanting even in knowledge of the history of philosophy, and that in the parts of the so-called system that he has developed (for example, in the doctrine of virtue and of rights) there reigns the most squalid crowd of abstractions and of anti-historical determinations? What does it matter that we find the man of the eighteenth century on every page of his book, and that he was absolutely without sympathy for the tendencies of thought of the Hamanns and of the Herders? There always remains the fact that the *a priori* synthesis carried in itself even that which its discoverer ignored or denied.

The theory of history in Hegel.

It would be preferable to say that all Kant's failures in recognition and all his lacunæ are certainly of importance, just because they provided his followers with a new problem, and generated by way of contrariety the philosophy of Schelling and the historical philosophy of Hegel. Not even in Hegel is there to be found the elaboration of the doctrine of the individual judgment, nor is its identity with that of the concept explicitly recognized. But in Hegel not only do we find ourselves in the full historical atmosphere (suffice it to recall his histories of art,

of religion, of philosophy and of the general development of the human race, which are still the most profound and the most stimulating writings upon history that exist); but these historical elucidations are all connected with the fundamental thought of his Logic: the concept is immanent and is divided in itself in the judgment, of which the general formula is that the individual *is* the universal, the subject *is* the predicate, every judgment is a judgment of the universal, and the universal is the dialectic of opposites. For this reason also, we find in the works of Hegel a historical method far in advance of all his predecessors and also (save in a few points) of his successors. He maintained, with much vigour, the necessity of the interpretative and rational element in history; and to those who demanded that a historian should be disinterested, in the same way as a magistrate who judges a case, he replied that since the magistrate has nevertheless his interest, that for the right, so has the historian also his interest, namely that for truth.[1]

Hegel's defect in relation to history (as was Vico's before him but on a larger scale) was the philosophist error, which led him to the design of a philosophy of history, rising above history

W. von Humboldt.

[1] *Encycl.* § 549; and all the introduction to the *Phil. d. Gesch.*

properly so-called. The psychological explanations of this strange duplication, together with its philosophic motives, have already been adduced.[1] Wilhelm von Humboldt certainly alluded to Hegel and intended to oppose him in this respect in his discourse concerning the office of the historian (1820). Here the method of the writer of history was likened to that of the artist. Fancy is as necessary to the historian as to the poet, Humboldt said, not in the sense of free fancy, but as the gift of reconstruction and of association. History, like art, seeks the true form of events, the pure and concrete form of real facts. But whereas art hardly touches the fugitive manifestations of the real, in order to rise above all reality, history attaches itself to those manifestations and becomes totally immersed in them. The ideas which the historian elaborates are not introduced by him into history, but discovered in reality itself, of which they constitute the essence. They are the outcome of the fulness of events, not of an extrinsic addition, as in what is called philosophic or theological history (Philosophy of history). Certainly, universal history is not intelligible without a world-order (eine Weltregierung). But the historian possesses no instru-

[1] See above, Part III. Chap. III.

ment which enables him directly to examine this design, and every effort in which he attempts to reach it, makes him fall into empty and arbitrary teleologism. He must, on the contrary, proceed by deducing it from facts examined in their individuality; for the end of history can only be the realization of the idea, which humanity must represent from all sides and in all the different modes in which finite form can ever be united with the idea. The course of events can only be interrupted when idea and form are no longer able to interpenetrate one another.[1] The protest was justified, not indeed against the fundamental doctrine of Hegel, but rather against one of its particular aberrations. But the protest was inferior in the determinateness of its concepts to the philosophy which it opposed. Even in the healthy tendency of the Hegelian doctrine, ideas should not be introduced but discovered in history. And if it sometimes seemed that the Philosophy of history introduced them from without, this happened because in that case true ideas were not employed and the concreteness of the fact was not respected.

F. Brentano.

The theory of the individual judgment has

[1] "Ueber die Aufgabe des Geschichtsschreibers," in the *Transactions* of the Academy of Berlin, 1882, and reprinted in *W. W.*

made no progress in the Logics of the nineteenth century, save for certain timely explanations concerning the existential character of the judgment given by Brentano and his school. Brentano, who is an Anti-Kantian, considers the period inaugurated by Kant to be that of a new philosophical decadence. Yet notwithstanding his sympathy for mediæval scholasticism and for modern psychologism, he has too much philosophic acumen to remain fixed in the one or to lose himself in the other. Thus the tripartition of the forms of the spirit, maintained by him,[1] beneath the external appearance of a renovated Cartesianism, bears traces of the abhorred criticism, romanticism and idealism. The first form, the pure representation, answers to the æsthetic moment; the second, the judgment, is the primitive logical form answering to the Kantian *a priori* synthesis; and love and hatred, the third form, which contains will and feeling, is not without precedent among the Post-Kantians themselves. He reasonably criticizes the various more or less mechanical theories, which treat the judgment as a connection of representations or a subsumption of concepts, and defends the *idiogenetic* against allogenetic theories. But

[1] F. Brentano, *Psychologie*, Leipzig, 1874.

when he tries to prove that the judgment "A is" cannot be resolved into "A" and "is" (that is, into A and existence), because the concept of existence is found in the judgment and does not precede it, he goes beyond the mark. For the concept of existence certainly does not precede, but neither does it *follow* the judgment: it is contemporaneous; that is to say, it exists only in the judgment, like the category in the *a priori* synthesis. And he goes beyond the mark again, when he makes existentiality the character of the judgment, whereas existentiality is only one of the categories and consequently, if it be indispensable for the constitution of the judgment, it is not sufficient for any judgment, since for every judgment there is necessary the inner determination of the judgment as essence and as existence. For the rest, this is easily seen in the theories of his school, which end by establishing a double degree or form of judgment, thus creating a duality that cannot be maintained.[1] In any case, in the researches of Brentano and his followers, there is affirmed the need for a complete doctrine of the judgment and of its relation (which in our opinion is one of identity)

[1] F. Hildebrand, *Die neuen Theorien der kategorischen Schlüssen*, Vienna, 1891.

with the doctrine of the concept. The theories of values and of judgments of values already mentioned, in their investigation of the universal or valuative element, express the same need from another point of view; although none of them discovers, by recalling the Kantian-Hegelian tradition, that values are immanent in single facts, and that consequently judgments of value, as judgments, are the same as individual judgments.

Controversies concerning the nature of history.

Enquiries concerning the character of history may assist the constitution of a theory of individual judgments. These enquiries have never enjoyed so much favour as in the last decade of the nineteenth century. Naturalism or positivism has provided the incentive to such enquiries, for it brought into being the problem: "whether history is or is not a (natural) science," by its attempt to violate and pervert history by raising it (as they said, and it must have sounded ironical) to the rank of a science, that is to say, of a naturalistic science. There were two answers to the problem: (1) that history is a science *sui generis* (not natural); (2) that it is, not a science, but an art, a particular form of art, the representation of the real.

The first of these answers is to be found in the

work of Rickert (1896–1902), cited above, and in the almost contemporary work of Xénopol (1899).[1] Rickert's work is that of a professional philosopher, and a follower of Windelband; the other, of an intelligent historian, who is somewhat lacking in equipment as a philosopher. Rickert, after having examined the naturalistic process and demonstrated how it finds a limit in individuality, next examines historical process, which takes possession of the field that naturalism is obliged to relinquish. Xénopol upholds the same distinction, of a double series of sciences, historical and theoretical, of *phénomènes successifs* and of *phénomènes de répétition*. To both these writers (besides the merit of having revived, in opposition to naturalism, the consciousness of individuality) belongs that of having understood that the field of history extends far beyond that ordinarily assigned to it, and embraces every manifestation of the real. But merely successive phenomena or phenomena of mere repetition do not exist and are not conceivable; nor is it true that the sciences dealing with the former stop at differences of fact and neglect identities. For how could a history of political facts be written, if no attention were

Rickert; Xénopol. History as science of the individual.

[1] *Les Principes fondamentaux de l'histoire*, Paris, 1899; 2nd ed., entitled *La Théorie de l'histoire*, Paris, 1908.

paid to the constant political nature of those facts? or of poetry, without paying attention to the constant poetical nature of all its historical manifestations? or of zoological species, without paying attention to the constant nature of the organism and of life? The distinction, therefore, as formulated by Xénopol, is little enough elaborated, not to say crude. Rickert, for his part, falls into a like error, owing to his failure to respect that intuitive and individual element, which he had previously admitted. Hence the serious contradictions, in which he becomes involved in the second part of his book. After having defined the concept as peculiar to the naturalistic method, he eventually claims to find also a species of concept in the procedure of history, which he had distinguished from and opposed to the former: a *historical* concept, which is obtained by cutting out, in the extensive and intensive infinity of facts, certain groups, which are placed in relation by means of practical criteria of importance and of value. It is true (he writes) that the concept has been defined by us as something of universal content; but now we *wish* precisely to surpass this one-sidedness, and therefore in the interest of logic it is justifiable to give the name concepts also to the thoughts which express the *historical essence*

of reality.[1] It is worse still when he attempts to explain the ineradicable intuitive and æsthetic element of historical narration; for holding art to be without truth and of use only in producing some sort of artistic (hedonistic?) effect, he recognizes that element as a means of endowing narration with liveliness and of exciting the fancy.[2] A consequence of this lack of understanding of the æsthetic function has been the laborious and vain attempt which Rickert is obliged to make, to determine to what personages and facts we are to attribute objective historical value.

History as art.

The second answer, that history is an art (that is to say, a special form of art, which is distinguished from the rest, in that it represents, not the possible but the real), avoids the above-mentioned difficulties. It distinguishes clearly between the natural sciences and history; it explains the ineliminability and the function of the intuitive element in history, and does not lose itself in the vain search for the distinctive criterion between historical facts and non-historical facts, because it declares that all facts are historical.[3] But it must in any case be corrected and completed with

[1] *Grenzen d. naturwiss. Begriffsbildung*, pp. 328-29.

[2] *Op. cit.* pp. 382-89.

[3] This is the thesis maintained in 1893 by the author of this book, cf. also B. Croce, "Les Études relatives à la théorie de l'histoire en Italie," in the *Revue de synthèse historique*, v. pp. 257-259.

the conclusion that the representation of the real is no longer simple representation or simple art, but the interpenetration of thought and representation, that is to say, philosophy-history.[1]

Other controversies concerning history.

All the other controversies recently engaged upon, relate to the criteria of interpretation, or the system of ideas, which serves as the basis of any sort of historical narration. Thus there have been disputes as to the precise meaning and the greater or less importance in history of climate, of race, of economic factors, of individuality, of collectivity, of culture, of morality, and of intelligence; and also as to how teleology, immanence, providence, and so on, are to be understood in history. In these disputes there recur constantly the names of Buckle, of Taine, of Spencer, of Ranke, of Marx, of Lamprecht and of others. It is evident that those controversies concern, not only the gnoseological nature of historical writing, but the system of the spirit and of the real, the conception of the world itself. The materialist and the spiritualist, the theist and the pantheist, will solve them differently. To write their history here would be to go beyond the boundaries of Logic and of the particular history of Logic, that we have set ourselves.

[1] See above, Part II. Chap. IV., and the note concerning it.

IV

THEORIES OF THE RELATIONS BETWEEN THOUGHT AND WORD AND FORMALIST LOGIC

Relation between the history of Logic and that of the Philosophy of language.

THE history of Logic depends very closely upon the history of the Philosophy of language, or of Æsthetic, understood as the philosophy of language and of expression in general. Every discovery concerning language throws new light upon the function of thought, which, surpassing language, employs it as an instrument, and therefore unites itself with language both negatively and positively. It belongs to the progress of the Philosophy of language, not less than to that of Logic, to have determined in a more exact manner the relations between thought and expression, as also to have dissipated or begun the dissipation of empirical and formalist Logic. This Logic, deluding itself with the belief that it was analysing thought, presents a series of mutilated and empty linguistic forms.

This error, which appeared very early in our

Logical formalism. Indian Logic free of it.

western world, has spread during the centuries and yet dominates many minds; so true is this that "Logic" is usually understood to mean just illogic or formalist Logic. We say our western world, because if Greece created and passed on the doctrine of logical forms, which was a mixture of thoughts materialized in words and of words become rigid in thoughts, another Logic is known, which, as it seems, developed outside the influence of Greek thought, and remained immune from the formalist error. This is Indian Logic, which is notably antiverbalist, though very inferior to that of Greece and of Europe in wealth and depth of concepts, and limited almost exclusively to the examination of the empirical concept or reasoning, of naturalistic induction or *expectatio casuum similium*. Indian Logic studies the naturalistic syllogism in *itself*, as internal thought, distinguishing it from the syllogism *for others*, that is to say, from the more or less usual, but always extrinsic and accidental forms of communication and dispute. It has not even a suspicion of the extravagant idea (which still vitiates our treatises) of a truth which is merely syllogistic and formalist, and which may be false in fact. It takes no account of the judgment, or rather it considers what is called judgment, and

what is really the proposition, as a verbal clothing of knowledge; it does not make the verbal distinctions of subject, copula and predicate; it does not admit classes of categorical and hypothetical, of affirmative and of negative judgments. All these are extraneous to Logic, whose object is the constant: knowledge considered in itself.[1]

Aristotelian Logic and formalism.

It was a subject of enquiry and of disagreement, especially during the second half of last century, whether formalist Logic, the Logic of the schools, could legitimately be called *Aristotelian*. Some, among whom were Trendelenburg and Prantl, absolutely denied this, and wished to restore the genuine thought of Aristotle, opposing it to post-Aristotelian and mediæval Logic. But they themselves were so enmeshed in logical formalism, that they were not capable of determining its peculiar character. The contrast between those two Logics, so far as it struck them, concerned secondary points. If the proper character of formalism consists in the confusion between thought and word, how are we to deny that Aristotle fell into this error, or that at any rate he set his foot upon the

[1] See the recent exposition of the secular Indian Logic, in its most complete form, as found in a treatise of the twelfth century, in H. Jacobi, "Die indische Logik," in the *Nachrichten v. d. Königl. Gesellsch. d. Wissenschaft zu Göttingen*, Philol.-hist. Klasse, 1901, fasc. iv. pp. 460-484.

perilous way? Certainly he did not proceed to the exaggerations and ineptitudes of later logicians. He was ingenuous, not pedantic. And his books (and in particular the *Analytics*) are rich in acute and original observations. He was a philosopher, and his successors were very often manual labourers. But Aristotle (probably influenced by the mathematical disciplines) conceived the idea of a theory of *apodeictic*, which, from simple judgments, through syllogisms and demonstrations, reached completeness in the definition as its last term. The concept was the first term, as the loose concept or name, the last term was the concept defined. He was not ignorant that not everything can thus be demonstrated, that in the case of the supreme principles such a demonstration cannot be given, and it is vain to look for it, and that there is alongside the apodeictic a science of *anapodeictic*. But that did not induce him to abandon the study of verbal forms for a close study of the concepts or of the category, which is the demonstration of itself. In his divisions of judgments he was very discreet; but yet he distinguished them verbally, as universal, particular and indefinite, negative and affirmative. In the syllogism he distinguished only three figures, and affirmed that of

those the first is the truly scientific (ἐπιστημονικόν), because it determines *what is*, whereas the second does not give a categorical judgment and affirmative knowledge, and the third does not give universal knowledge; but these restrictions did not suffice to correct the false step made in positing the idea of *figures* and *moods* of the syllogism. When we examine the various doctrines of Aristotle and compare them with the forms and developments which they assumed later, it can be maintained that no logician was less Aristotelian than Aristotle. But even he was Aristotelian, and the impulse to seek logic in words had been begun in so masterly a manner that for centuries it weighed upon the mind like a fate.

Later formalism.

Why, then, should we rage, like many modern critics, against the later manipulations and amplifications to which Aristotelian Logic was submitted by Peripatetics and Stoics, by commentators and rhetoricians, by doctors of the Church and masters of the University, by Neolatins and Byzantines, by Arabs and Germans? We certainly harbour no tenderness for the *hypothetical* and *disjunctive* syllogism, or for the *fourth figure* of the syllogism, as elaborated from Theophrastus to Galen, or for the *five predicables* of Porphyry, or for subtleties

upon the *conversions* of judgments, or for the *mnemonic verses* of Michael Psellus and of Peter Hispanus, or for the geometric symbols of the concepts and syllogisms invented by Christian Weiss in the seventeenth century ("to direct blockheads aright,"[1] as Prantl permits himself to say), or for the calculations upon the moods of the syllogism made by John Hispanianus, which he found to be no less than five hundred and sixty in number, thirty-six of which are conclusive. We also willingly admit that errors have been made in the traditional interpretation of certain doctrines of Aristotle (for example, in the doctrine of the enthymeme).[2] But setting aside these errors, we can say that for those excogitations and distinctions support was already found in the Organon of Aristotle, and that they were derived from principles there laid down. Certainly, with their crude roughness and their evident absurdity, they shock good sense in a way in which the distinctions of Aristotle did not, for these were in some sort of relation with the empirical description of the usual mode of scientific discussions. But the error nestled in themselves; and it was well that it should be

[1] *Gesch. d. Logik*, i. p. 362.
[2] Hamilton, *Fragments philosophiques*, French tr. pp. 238-242.

intensified, so that it might leap to the eyes of all, just as it is sometimes well that there should be scandals in practical life.

Rebellions against Aristotelian Logic. The opposition of the humanists and their motives.

The rebellions which the school (in the wide sense of the word, from the Peripatetic to the modern) continued to arouse in regard to these doctrines might seem to be of greater interest than this labour of embroidering and carving. But since there has been a time during which every protest, and indeed, every insult levelled against the philosopher of Stagira seemed a sign of original thought, of spiritual freedom and of secure progress, it is well to repeat that an indispensable condition for surpassing the Aristotelian Logic was a new Philosophy of language. Such a condition was altogether wanting in the past and is partly wanting now. It is therefore not surprising that when those rebellions are closely examined, we discover in the midst of secondary and superficial disagreement something quite different from what was expected; not the radical negation, but the substantial acceptance, explicit or understood, of the principles of formalist Logic.

Such is the case with the rebellions of the humanists, Ciceronians and rhetoricians, which took place in the fourteenth and fifteenth cen-

turies, of Lorenzo Valla, of Rudolph Agricola, of Luigi Vives, of Mario Nizolio, of Peter Ramus. The motive power with all of them was abhorrence for the heavy scholastic armour. Culture, leaving the cloisters, spread itself abroad in life; philosophy began to be written in the common tongue, and for this reason men sought forms of exposition that were rapid, easy and clear or eloquent and oratorical. But under these new forms the direction of logical thought remained unchanged. Ramus, for example, who applied to Aristotle the elegant terms of *fatuus impostor, chamaeleon somnians et stertens*, and so forth, ended by claiming that he alone had understood his true thought, and showed by the reforms of it that he proposed (among which was the suggestion that the third figure of the syllogism should pass to the first place) that he, too, was still revolving in the narrow circle of formalism.[1]

The opposition of naturalism.

Even the opposition of naturalism to the Aristotelian Logic did not strike it to the heart, but wished to replace and more often to accompany one form of empiricism with another: the rules of the syllogism with the precepts of induction, the sophistical refutations with the determination

[1] Prantl, "Über Petrus Ramus," in the *Sitzungsberichte d. k. bayer. Akad. d. Wissensch.*, Philol.-hist. Klasse, 1878, ii. pp. 157-169.

of the four idols that preoccupy men's minds. Bacon never dreamed of denying to syllogistic the value of true doctrine. He believed, however, that it had already been sufficiently studied and developed, that it lacked nothing, and even possessed something superfluous, whereas there was still wanting a criterion of invention and of induction, which was of fundamental importance for syllogistic itself. In making the inventory of knowledge (he writes) it is to be observed that we find ourselves almost in the conditions of a man who inherits an estate, in the inventory of which there is noted: "ready money, none" ("numeratae pecuniae, nihil").[1] Hence he raised his voice against the abuse of disputations and of reasoning as to matters of fact; the subtlety of the syllogism is always conquered by that of nature.[2] The syllogism consists of propositions, propositions of words, and words are the counters of concepts; but if the concepts are confused or wrongly abstracted, the syllogistic consequences deduced from them are without any sort of security. Hence the necessity of beginning with induction: "*spes est una in inductione vera.*"[3] Bacon's position (which was therefore not anti-

[1] *De dign. et augm.* iv. ch. 2-5. [2] *Ib.* ch. 2.
[3] *Nov. Org.* i., aphorism 14.

formalist, but only an addition or complement to formalism) has been renewed, word for word, in all inductive Logics, up to that of the English school of the nineteenth century, and to ours of to-day. Stuart Mill's book expresses the combination of the two empiricisms, syllogistic and inductive, in its very title: "A system of Logic, *ratiocinative* and *inductive*, being a connected view of the principles of evidence and the methods of Scientific *investigation*."

Labour of simplification in the eighteenth century. Kant.

In the eighteenth century, while Leibnitz sought an amplification and perfecting of syllogistic in the logical calculus, and some followed him who did not, however, attain to true effectiveness in the history of culture,[1] formalist

[1] It is pertinent to translate here a passage of Hegel, in relation to this Leibnitzian tendency, which is now again becoming fashionable. "The extreme form of this (syllogistic) disconceptualized manner of dealing with the conceptual determinations of the syllogism, is found in Leibnitz, who (*Opp.* t. ii. p. 1) places the syllogism under the calculus of combination. By this means he has calculated how many positions of the syllogism are possible, and thus, by taking count of the differences of positive and negative judgments, then of universal, particular, indeterminate and singular judgments, he has arrived at the result that the possible combinations are 2048, of which, after excluding the invalid, there remain 24 valid. Leibnitz boasts much of the utility possessed by the analysis of combination in finding, not only the forms of the syllogism, but also the connections of other concepts. This operation is the same as that of calculating the number of possible combinations of letters that can be made from an alphabet, or of moves in a game of draughts, or of different hands in a game of *hombre*, and so on. From which it is clear that the determinations of a syllogism are placed on a level with moves in draughts, or hands in *hombre*. The rational is taken as something dead, altogether deprived of the concept, and the peculiar character of the concept and its determinations is left out; that is to say, the character that in so far as they are spiritual facts, they are *relation*, and that, in virtue of this relation, they

Logic fell always more and more into discredit, not only as Logica *utens*, but also as *docens*, that is to say, as theory.

Hence the moderate tendency, to which Kant adhered, which consists of preserving that Logic, while seeking to correct, and, in particular, to simplify it. For example, Kant undertook to

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suppress their *immediate* determination. This Leibnitzian application of the calculus of combination to the syllogism and to the connection of other concepts is not to be distinguished in any way from the discredited *art of Lully*, save for the greater methodicalness in calculation of which it gives proof; it resembles that absurdity in every other respect. Another thought, dear to Leibnitz, was included in the calculus of combination. He had nourished this thought in his youth, and notwithstanding its immaturity and superficiality, he never afterwards abandoned it. This was the thought of a *universal characteristic* of concepts, of a writing, in which every concept should be represented as proceeding from others or as referring to another; almost as though, in a rational connection, which is essentially dialectic, a content should preserve the same determinations that it has when standing alone.

"The calculus of Ploucquet is doubtless supported by the most cogent mode of submitting the relation of the syllogism to calculation. He abstracts in the judgment from the difference of relation; that is to say, from its singularity, particularity and universality, and fixes the *abstract identity* of subject and predicate, placing them in a *mathematical relation*. This relation reduces reason to an empty, tautological formation of propositions. In the proposition, 'the rose is red,' the predicate must signify, not red in general, but only the determinate 'red of the rose.' In the proposition, 'all Christians are men,' the predicate must signify only 'those men who are Christians.' From this and from the other proposition, 'Hebrews are not Christians,' follows the conclusion (which did not constitute a good recommendation for this calculus with Mendelssohn): 'hence, Hebrews are not men' (that is to say, they are not those men, who are Christians).

"Ploucquet gives as a consequence of his invention *posse etiam rudes mechanice totam logicam doceri, uti pueri arithmeticam docentur, ita quidem, ut nulla formidine in ratiocintiis suis errandi torqueri, vel fallaciis circumveniri possint, si in calculo non errant*. This eulogy of the calculus, to the effect that by its means it is possible to supply uneducated people with the whole of Logic, is certainly the worst that can be said of an invention which concerns logical Science" (*Wiss. d. Logik*, iii. pp. 142-43).

demonstrate the "false subtlety of the four figures of the syllogism," and at the same time rendered traditional Logic yet more formalist by withdrawing from it all examination of the synthesis and the categories, which he referred to his new transcendental Logic. Traditional Logic, which he respected and held to be substantially perfect, constituted (he said) a canon of the intellect and of reason, but only in the *formal* aspect of their employment, whatever be the content to which it is applied. Its only criterion is the agreement or non-agreement of any knowledge with the general and formal laws of the intellect and of reason; a *conditio sine qua non* of every truth, but a *conditio* which is only negative.[1]

Refutation of formalist Logic. Hegel; Schleiermacher.

Hegel, on the contrary, opposed tradition. He understood the character of formalist Logic marvellously well: this "*empirical* Logic, a bizarre science, which is an *irrational* knowledge of the *rational*, and sets the bad example of not following its own doctrines. Indeed it assumes the licence of doing the opposite of what its rules prescribe, when it neglects to deduce the concepts and to demonstrate its affirmations."[2] In so far as it was empirical it was intellectualist, and presented

[1] *Kr. d. rein. Vern.*, ed. quoted, pp. 101-2.
[2] *Wiss. d. Logik*, iii. p. 51.

the determinations of reason in an abstract and atomic manner in combining them mechanically. The new concept of the concept, originated by Hegel, creates from itself its own theories and allows the old formalist theories to disappear as dead and dry remains. The forms of thought are henceforth the very forms of the real; the Idea is the unity of concept and representation, because it is the universal itself, big with the individual. Things are realized judgments, and the syllogism is the Idea which identifies itself with its own reality. This at bottom amounts to saying that thought fully dominates reality, because it is not an extrinsic addition or an interposed means, but Reality itself, which makes itself thought, because it is thought. Other philosophers, too, contemporaries and adversaries of Hegel, rejected formalist Logic, and among these was Schleiermacher.[1] He made the logical forms of the *concept* and of the *judgment* correspond to the two forms of reality, *being* and *doing*, finding corresponding analogies in *space*, a dividing of being, and in *time*, a dividing of doing. The concept and the judgment mutually presuppose one another, and give rise to a circle, which is so only when considered temporally; since at the

[1] *Dialektik*, ed. quoted, pp. 74-5.

point of indifference, of fusion, of indistinction the two make one.[1] Schleiermacher differed from Hegel (who attains in thought the unity of the real) in being obliged to withdraw the syllogism from the number of the essential forms of thought, because (he says), "if the syllogism were a true form, a being of its own should correspond to it, and this is not found to be the case.[2]

Its partial persistence owing to insufficient ideas as to language.

But if with the Hegelian criticism formalist Logic was surpassed by a truly philosophical Logic, and thereupon lost all its importance, it cannot be said that it was definitely dissolved. In Hegel himself there remain traces of it in certain divisions of the forms of judgment and of syllogism, which he either accepts and corrects or creates anew. Definitive criticism demanded that in any case the error peculiar to this empiricism should be recognized. This error consists in confusing language and thought, taking thought as language, and therefore also language as thought. Hegel could not effect this criticism, for he was logistic as regards the theory of language, conceiving it to be a complex of logical and universal elements.[3] Hence the coincidence between the forms of language and those of

[1] Work cited, pp. 145, 147-9. [2] Work cited, pp. 146, 291-2.
[3] *Wiss. d. Logik*, i. pp. 10-11 and *passim*; *Encykl.* § 205 and elsewhere.

thought did not seem to him irrational, provided that both were taken in their true connection. The revival of the Philosophy of language, begun by Vico and carried on by Hamann and by Herder, and then again by Humboldt, remained unknown to him or had no influence upon him. Nor, to tell the truth, has it influenced even later Logic, for had it acquired this knowledge, it would have been freed for ever from formalism or verbalism and have possessed a method and a power of application to the nature of the problems that belong to it. Just a trace of serious discussion (but made rather in the interest of the Philosophy of language than in that of Logic) appears in the polemic between Steinthal and Becker concerning the relations between Logic and Grammar.[1]

Formalist Logic in Herbart, in Schopenhauer, in Hamilton.

For this reason, formalist Logic has continued to exist (with difficulty if you will, but yet to exist) in the nineteenth century. From Kant it had received with the name *formal* a new baptism and a new legitimization. Among post-Kantians Herbart clung closely to it, though he somewhat simplified it, and hostile as he was to all transcendental Logic, he continued to conceive it as the sole instrument of thought. Schopenhauer held logical forms to be a good parallel to rhetori-

[1] *Estetica*[8], p. 11, ch. xii.

cal forms, and limited himself to proposing some slight remodelling of the former: for example, to consider judgments as always universal (both those called by that name and particular and singular judgments as well), and to explain hypothetical and disjunctive judgments as pronounced upon the comparison of two or more categorical judgments. From the syllogism, which he defined as "a judgment drawn from two other judgments, without the intervention of new conditions," he dropped the fourth figure, but he proclaimed the first three to be "ectypes" of three real and essentially different operations of thought.[1] Kant's teaching was followed in England by Hamilton. Hamilton insisted upon the purely hypothetical character of logical reasonings; he excluded from Logic discussions of possibility and impossibility and of the modalities, and declared that the intrusion into that science of the concepts of perfect or imperfect induction, which refer to material differences and are therefore extralogical,[2] was a fundamental error. In this way he reacted against inductive Logic, which, in his country especially, had prevailed against formalist Logic or had strangely accompanied it. He persuaded himself that he could perfect the latter, by simplifying

[1] *Werke*, ed. cited, ii. pp. 120-135. [2] Work cited, pp. 159, 165.

the doctrine of the judgment, by means of what is called the *quantification of the predicate.*[1]

Later logicians continued to employ these partial and superficial modifications. Trendelenburg, as has been mentioned, believed that he could make progress by referring the thing to its beginning, that is, by turning from Aristotelianism to Aristotle, and owing to the curious influence of a thought of Hegel, he assigned to logic and reality a common foundation which, for him, was not the Idea, but Movement. Lotze reduced the forms of judgments to three only, according to the variations of the copula: categorical, hypothetical and disjunctive judgments; and he made impersonal judgments precede categorical. By this last class he vainly sought to satisfy the desire for a theoretic form which is presupposed in properly logical thought, and it is yet to seek. Lotze always had at bottom an intellectualistic concept of language: poetry and art seemed to him to be directed, not to contemplation and expression, but to emotion and to feelings of pleasure and pain. He could not therefore recognize the primitive theoretic form in art, in intuition, in pure expressiveness. Drobisch, the Herbartian, revealed formalism in all its crudity,

More recent theories.

[1] See above, pp. 297 *n.*, dealing with Ploucquet.

beginning with the affirmation that "there are certainly necessary judgments and syllogisms, but no necessary concepts." Sigwart reformed the classification of judgments (of denomination, of property and activity, impersonal, of relation, abstract, narrative and explicative), and retouched that of syllogisms. Wundt, accepting the old tripartition of logical forms, also attempts new subdivisions, distinguishing judgments for example, according to their subject, into indeterminate, singular and plural; according to their predicate, into narrative, descriptive and explicative; according to their relation, into judgments of identity, superordination, subordination, co-ordination and dependence; and into negative predications and negative oppositions. Brentano's reform does not in general abandon the formalist circle; hence, having assigned the quantity of judgments to their matter, he limits himself to dividing them into affirmative and negative; among immediate inferences he accepts only the inference *ad contradictoriam*; among the laws of the syllogism he denies the law *ex mere negativis*, maintaining indeed that *ex mere affirmativis nil sequitur*; he defends, as the law of all syllogisms, that of *quaternio terminorum*, which used to pass for the sign of the sophism; and he further

abolishes the vain distinctions of figures and moods.

Mathematical Logic.

Opposed as radical innovators to these logicians, who work more or less with traditional formulas, are the mathematical logicians, who follow, not philosophy, but certain fictions of the Leibnitzian philosophy. George Bentham, De Morgan, Boole, Jevons, Grassman and now several in England, in France, in Germany and in Italy (Peano), have been and are representative of this tendency. They are innovators only in a manner of speaking, for they are ultra-reactionaries, far more formalist than the formalist Aristotle. They are dissatisfied with the divisions made by him, not because they are too numerous and arbitrary, but because they are too few and still bear some traces of rationality. They strive to the uttermost to provide a theory of thought, from which all thought is absent. This kind of Logic has been well defined by Windelband as "Logic of the green cloth."[1]

Inexact idea of language among mathematical logicians and intuitionists.

These logicians have naturally inherited the other fiction of Leibnitz, namely that of the possibility of a constant and universal language,[2]

[1] In his remarks upon the present state of Logic, contained in his work, *Die Philosophie im Beginn des zwanzigsten Jahrhunderts* (Heidelberg, 1904), i. pp. 163-186.

[2] See my remarks in the *Critica*, iii. pp. 428-433 (concerning the work of Messrs. Couturat and Léau); and cf. same, iv. pp. 379-381.

thus revealing another reason for their aberration, and the usual support of the whole formalist error—ignorance of the alogical nature of language. The nature of language remains obscure from another point of view, even to the modern intuitionists (Bergson). They continue to regard as language, not language in its simplicity, but the intellectualist procedure (classificatory and abstractive) which falsifies the continuous in the discontinuous, breaks up duration, and builds a fictitious world upon the real world. They are therefore ultimately led to attribute the value of a pure expression of reality to music, as though music were not language, and true language (not the intellectualist discourse which they accept in place of it) were not essentially music, that is to say, poetry. For the intellectualists also, a Logic (were they to resolve upon constructing one) would be nothing but formalist.

V

CONCERNING THIS LOGIC

Traditional character of this Logic and its connection with the Logic of the philosophic concept.

THE Logic which we have expounded in this treatise is also in a certain sense traditional Logic. But it should be connected, not with the tradition of formalism, but rather with that of the Hegelian Logic, of Kantian transcendental Logic, and so of the loftiest Hellenic speculative thought. In other words, its affinity should be sought in the logical sections of the *Critique of Pure Reason* of Kant, or in the *Metaphysic* of Aristotle, and not in the *Lessons in Logic* or in the *Analytics* of the same authors. This traditional character endows it with confidence, because man has always thought the true, and it is to be doubted if he who fails to discover the truth in the past, possesses the truth of the present and of the future, of which in his proud isolation he thinks himself secure.

Its innovations.

But to be truly attached to tradition means to carry it on and to collaborate with it. Contact with thought is always dynamic and propulsive

and urges us to go forward, since it is impossible to stop or to turn back. For this reason, this Logic presents some novelties, of which the fundamental and principal can be thus enumerated:

I. Exclusion of empirical and abstract concepts.

I. Accepting the doctrine, which culminates in the last great modern philosophy of the *pure Concept*, as the only doctrine of logical truth, this Logic excludes empirical and abstract concepts, declaring them to be irreducible to the pure concept.

II. Non-theoretic character of the second and autonomy of the empirical and mathematical sciences.

II. Accepting for these last the *economic theory* of the empirical and abstract sciences and considering them as having a practical character and therefore as non-concepts (pseudoconcepts), this Logic denies that they exhaust logical thought, indeed it altogether denies that they belong to it and demonstrates that their very existence presupposes the reality of the pure concept. Hence, it connects the two doctrines with one another and asserts the *autonomy* of philosophy, at the same time respecting the relative autonomy of the empirical and mathematical sciences thus rendered atheoretical.

III. The concept as unity of distinctions.

III. In the doctrine concerning the organism of the pure concept, it accepts the *dialectic* view or the unity of opposites, but denies its immediate validity for the distinctions of the concept; the

unity of which is organized as a unity of distinctions in the theory of *degrees* of reality. In this way, the autonomy of the forms of reality or of the spirit is also respected and the *practical* nature of error established.

IV. Identity of the concept with the individual judgment and of philosophy with history.

IV. The richness of reality, of facts, of experience, which seemed to be withdrawn from the pure concept and so from philosophy by the separation of it from the empirical sciences, is on the contrary restored to and recognized in philosophy, not in the diminished and improper form which is that of empirical science, but in a total and integral manner. This is effected by means of the connection, which is a *unity*, between *Philosophy* and *History*—a unity obtained by making clear and profoundly studying the nature of the concept and the logical *a priori* synthesis.

V. Impossibility of defining thought by means of verbal forms, and refutation of formalistic Logic.

V. Finally, the doctrines and the presuppositions of formalist Logic are refuted in a precise manner. The autonomy of the *logical form* is asserted and consequently the effort to contain its determinations in words or expressive forms is declared to be vain. These are certainly necessary, but obey, not the law of logic, but that of the æsthetic spirit.

Conclusion.

Such, summarily indicated, is the progress upon previous thought, which this Logic would

wish to represent. To gain this end, it has availed itself, not only of the help afforded by ancient and modern Logic, concentrated in the Hegelian Logic, but also of those others that have come into being since Hegel, and especially of æsthetic, of the theory of historical writing and of the gnoseology of the sciences. It has striven to avail itself of all scattered truths, but of none in an eclectic manner, that is to say, by making arbitrary collections or merely aggregations, for it has been conscious that scattered truths become truly truths when they are no longer scattered but fused, not many, but one.

THE END

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