The purpose of this article is to define the principal theories of the philosophical movements known under the names of Pragmatism, Instrumentalism, or Experimentalism. To do this we must trace their historical development; for this method seems to present the simplest way of comprehending these movements and at the same time avoiding certain current misunderstandings of their doctrines and their aims.

The origin of Pragmatism goes back to Charles Sanders Peirce, the son of one of the most celebrated mathematicians of the United States, and himself very proficient in the science of mathematics; he is one of the founders of the modern symbolic logic of relations. Unfortunately Peirce was not at all a systematic writer and never expounded his ideas in a single system. The pragmatic method which he developed applies only to a very narrow and limited universe of discourse. After William James had extended the scope of the method, Peirce wrote an exposition of the origin of pragmatism as he had first conceived it; it is from this exposition that we take the following passages.

The term "pragmatic," contrary to the opinion of those who regard pragmatism as an exclusively American conception, was suggested to him by the study of Kant. In the Metaphysic of Morals Kant established a distinction between pragmatic and practical. The latter term applies to moral laws which Kant regards as a priori, whereas the former term applies to the rules of art and technique which are based on experience and are applicable to experience. Peirce, who was an empiricist, with the habits of mind, as he put it, of the laboratory, consequently refused to call his system "practicalism," as some of his friends suggested. As a logician he was interested in the art and technique of real thinking, and especially interested, as far as pragmatic method is concerned, in the art of making concepts clear, or of construing adequate and effective definitions in accord with the spirit of scientific method.

Following his own words, for a person "who still thought in Kantian terms most readily, 'praktisch' and 'pragmatisch' were as far apart as the two poles; the former belonging in

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a region of thought where no mind of the experimental type can ever make sure of solid ground under his feet, the latter expressing relation to some definite human purpose. Now quite the most striking feature of the new theory was its recognition of an inseparable connection between rational cognition and rational purpose."

In alluding to the experimental type of mind, we are brought to the exact meaning given by Peirce to the word "pragmatic." In speaking of an experimentalist as a man whose intelligence is formed in the laboratory, he said: "Whatever assertion you may make to him, he will either understand as meaning that if a given prescription for an experiment ever can be and ever is carried out in act, an experience of a given description will result, or else he will see no sense at all in what you say." And thus Peirce developed the theory that "the rational purport of a word or other expression, lies exclusively in its conceivable bearing upon the conduct of life; so that, since obviously nothing that might not result from experiment can have any direct bearing upon conduct, if one can define accurately all the conceivable experimental phenomena which the affirmation or denial of a concept could imply, one will have therein a complete definition of the concept."2

The essay in which Peirce developed his theory bears the title: "How to Make Our Ideas Clear."3 There is a remarkable similarity here to Kant's doctrine. Peirce's effort was to interpret the universality of concepts in the domain of experience in the same way in which Kant established the law of practical reason in the domain of the a priori. The rational meaning of every proposition lies in the future. . . . But of the myriads of forms into which a proposition may be translated, what is that one which is to be called its very meaning? It is, according to the pragmatist, that form in which the proposition becomes applicable to human conduct, not in these or those special circumstances, nor when one entertains this or that special design, but that form which is most directly applicable to self-control under every situation, and to every purpose."4 So also, "the pragmatist does not make the summum bonum to consist in action, but makes it to consist in that process of evolution whereby the existent comes more and more to embody generals . . . "5—in other words—the process whereby the existent becomes, with the aid of action, a body of rational tendencies or of habits generalized as much as possible. These statements of Peirce are quite conclusive with respect to two errors which are commonly committed in regard to the ideas of the founder of pragmatism. It is often said of pragmatism that it makes action the end of life. It is also said of pragmatism that it subordinates thought and rational activity to particular ends of interest and profit. It is true that the theory according to Peirce's conception implies essentially a certain relation to action, to human conduct. But the role of action is that of an intermediary. In order to be able to attribute a meaning to concepts, one must be able to apply them to existence. Now it is by means of action that this application is made possible. And the modification of existence which results from this application constitutes the true meaning of concepts. Pragmatism is, therefore, far from being that glorification of action for its own sake which is regarded as the peculiar characteristic of American life.

It is also to be noted that there is a scale of possible applications of concepts to existence, and hence a diversity of meanings. The greater the extension of the concepts, the more they are freed from the restrictions which limit them to particular cases, the more is it possible for us to attribute the greatest generality of meaning to a term. Thus the theory of Peirce is opposed to every restriction of the meaning of a concept to the achievement of a particular end, and still more to a personal aim. It is still more strongly opposed to the idea that reason or thought should be reduced to being a servant of any interest which is pecuniary or narrow. This theory was American in its origin in so far as it insisted on the necessity of human conduct and the fulfillment of some aim in order to clarify thought. But at the same time, it disapproves of those aspects of American life which make action an end in itself, and which conceive ends too narrowly and too "practically." In considering a system of philosophy in its relation to national factors it is necessary to keep in mind not only the aspects of life which are incorporated in the system, but also the aspects against which the system is a protest. There never was a philosopher who has merited the name for the simple reason that he glorified the tendencies and characteristics of his social environment; just as it is also true that there never has been a philosopher who has not seized upon certain aspects of the life of his time and idealized them.

The work commenced by Peirce was continued by William James. In one sense James narrowed the application of Peirce's pragmatic method, but at the same time he extended it. The articles which Peirce wrote in 1878 commanded almost no attention from philosophical circles, which were then under the dominating influence of the neo-Kantian idealism of Green, of Caird, and of the Oxford School, excepting those circles in which the Scottish philosophy of common sense maintained its supremacy. In 1898 James inaugurated the new pragmatic movement in an address entitled, "Philosophical Conceptions and Practical Results," later reprinted in the volume, Collected Essays and Reviews. Even in this early study one can easily notice the presence of those two tendencies to restrict and at the same time to extend early pragmatism. After having quoted the psychological remark of Peirce that "beliefs are really rules for action, and the whole function of thinking is but one step in the production of habits of action," and that every idea which we frame for ourselves of an object is really an idea of the possible effects of that object, he expressed the opinion that all these principles could be expressed more broadly than Peirce expressed them. "The ultimate test for us of what a truth means is indeed the conduct it dictates or inspires. But it inspires that conduct because it first foretells some particular turn to our experience which shall call for just that conduct from us. And I should prefer to express Peirce's principle by saying that the effective meaning of any philosophic proposition can always be brought down to some particular consequence, in our future practical experience, whether active or passive; the point lying rather in the fact that the experience must be particular, than in the fact that it must be active."6 In an essay written in 1908 James repeats this statement and states that whenever he employs the term "the practical," he means by it, "the distinctively concrete, the individual, the particular and effective as opposed to the abstract, general and inert—'Pragmata' are things in their plurality—particular consequences can perfectly well be of a theoretic nature."

William James alluded to the development which he gave to Peirce's expression of the principle. In one sense one can say that he enlarged the bearing of the principle by the substitution of particular consequences for the general rule or method applicable to future experience. But in another sense this substitution limited the application of the principle since it destroyed the importance attached by Peirce to the greatest possible application of the rule, or the habit of conduct—its extension to universality. That is to say, William James was much more of a nominalist than Peirce.

One can notice an extension of pragmatism in the above passage. James there alludes to the use of a method of determining the meaning of truth. Since truth is a term and has consequently a meaning, this extension is a legitimate application of pragmatic method. But it should be remarked that here this method serves only to make clear the meaning of the term "truth," and has nothing to do with the truth of a particular judgment. The principal reason which led James to give a new color to pragmatic method was that he was preoccupied with applying the method to determine the meaning of philosophical problems and questions and that moreover, he chose to submit to examination philosophical notions of a theological or religious nature. He wished to establish a criterion which would enable one to determine whether a given philosophical question has an authentic and vital meaning or whether, on the contrary, it is trivial and purely verbal; and in the former case, what interests are at stake, when one accepts and affirms one or the other of two theses in dispute. Peirce was above all a logician; whereas James was an educator and humanist and wished to force the general public to realize that certain problems, certain philosophical debates have a real importance for mankind, because the beliefs which they bring into play lead to very different modes of conduct. If this important distinction is not grasped, it is impossible to understand the majority of the ambiguities and errors which belong to the later period of the pragmatic movement.

James took as an example the controversy between theism and materialism. It follows from this principle that if the course of the world is considered as completed, it is equally legitimate to assert that God or matter is its cause. Whether one way or the other, the facts are what they are, and it is they which determine whatever meaning is to be given to their cause. Consequently the name which we can give to this cause is entirely arbitrary. It is entirely different if we take the future into account. God then has the meaning of a power concerned with assuring the final triumph of ideal and spiritual values, and matter becomes a power indifferent to the triumph or defeat of these values. And our life takes a different direction according as we adopt one or the other of these alternatives. In the lectures on pragmatism published in 1907, he applies the same criticism to the philosophical problem of the One and the Many, that is to say of Monism and Pluralism, as well as to other questions. Thus he shows that Monism is equivalent to a rigid universe where everything is fixed and immutably united to others, where indetermination, free choice, novelty, and the unforeseen in experience have no place; a universe which demands the sacrifice of the concrete and complex diversity of things to the simplicity and nobility of an architectural structure. In what concerns our beliefs, Monism demands a rationalistic temperament leading to a fixed and dogmatic attitude. Pluralism, on the other hand, leaves room for contingence, liberty, novelty, and gives complete liberty of action to the empirical method, which can be indefinitely extended. It accepts unity where it finds it, but it does not attempt to force the vast diversity of events and things into a single rational mold.

From the point of view of an educator or of a student or, if you will, of those who are thoroughly interested in these problems, in philosophical discussions and controversies, there is no reason for contesting the value of this application of pragmatic method, but it is no less important to determine the nature of

this application. It affords a means of discovering the implications for human life of philosophical conceptions which are often treated as of no importance and of a purely dialectical nature. It furnishes a criterion for determining the vital implications of beliefs which present themselves as alternatives in any theory. Thus as he himself said, "the whole function of philosophy ought to be to find the characteristic influences which you and I would undergo at a determinate moment of our lives, if one or the other formula of the universe were true." However, in saying that the whole function of philosophy has this aim, it seems that he is referring rather to the teaching than to the construction of philosophy. For such a statement implies that the world formulas have already all been made, and that the necessary work of producing them has already been finished, so that there remains only to define the consequences which are reflected in life by the acceptance of one or the other of these formulas as true.

From the point of view of Peirce, the object of philosophy would be rather to give a fixed meaning to the universe by formulas which correspond to our attitudes or our most general habits of response to the environment; and this generality depends on the extension of the applicability of these formulas to specific future events. The meaning of concepts of "matter" and of "God" must be fixed before we can even attempt to reach an understanding concerning the value of our belief in these concepts. Materialism would signify that the world demands on our part a single kind of constant and general habits; and God would signify the demand for another type of habits; the difference between materialism and theism would be tantamount to the difference in the habits required to face all the detailed facts of the universe. The world would be one in so far as it would be possible for us to form a single habit of action which would take account of all future existences and would be applicable to them. It would be many in so far as it is necessary for us to form several habits, differing from each other and irreducible to each other, in order to be able to meet the events in the world and control them. In short, Peirce wrote as a logician and James as a humanist.

William James accomplished a new advance in Pragmatism by his theory of the will to believe, or as he himself later called it, the right to believe. The discovery of the fundamental consequences of one or another belief has without fail a certain influence on that belief itself. If a man cherishes novelty, risk, opportunity and a variegated esthetic reality. he will certainly reject any belief in Monism. when he clearly perceives the import of this system. But if, from the very start, he is attracted by esthetic harmony, classic proportions, fixity even to the extent of absolute security and logical coherence, it is quite natural that he should put faith in Monism. Thus William James took into account those motives of instinctive sympathy which play a greater role in our choice of a philosophic system than do formal reasonings; and he thought that we should be rendering a service to the cause of philosophical sincerity if we would openly recognize the motives which inspire us. He also maintained the thesis that the greater part of philosophic problems and especially those which touch on religious fields are of such a nature that they are not susceptible of decisive evidence one way or the other. Consequently he claimed the right of a man to choose his beliefs not only in the presence of proofs or conclusive facts, but also in the absence of all such proof. Above all when he is forced to choose between one meaning or another, or when by refusing to choose he has a right to assume the risks of faith, his refusal is itself equivalent to a choice. The theory of the will to believe gives rise to misunderstandings and even to ridicule; and therefore it is necessary to understand clearly in what way James used it. We are always obliged to act in any case: our actions and with them their consequences actually change according to the beliefs which we have chosen. Moreover it may be that, in order to discover the proofs which will ultimately be the intellectual justification of certain beliefs-the belief in freedom, for example, or the belief in God—it is necessary to begin to act in accordance with this belief.

In his lectures on Pragmatism, and in his volume of essays bearing the title *The Meaning of Truth*, which appeared in 1909, James extended the use of the pragmatic method to the

problem of the nature of truth. So far we have considered the pragmatic method as an instrument in determining the meaning of words and the vital importance of philosophic beliefs. Now and then we have made allusion to the future consequences which are implied. James showed, among other things, that in certain philosophic conceptions, the affirmation of certain beliefs could be justified by means of the nature of their consequences, or by the differences which these beliefs make in existence. But then why not push the argument to the point of maintaining that the meaning of truth in general is determined by its consequences? We must not forget here that James was an empiricist before he was a pragmatist, and repeatedly stated that pragmatism is merely empiricism pushed to its legitimate conclusions. From a general point of view, the pragmatic attitude consists in "looking away from first things, principles, 'categories,' supposed necessities; and of looking towards last things, fruits, consequences, facts." It is only one step further to apply the pragmatic method to the problem of truth. In the natural sciences there is a tendency to identify truth in any particular case with a verification. The verification of a theory, or of a concept, is carried on by the observation of particular facts. Even the most scientific and harmonious physical theory is merely an hypothesis until its implications, deduced by mathematical reasoning or by any other kind of inference, are verified by observed facts. What direction therefore, must an empirical philosopher take who wishes to arrive at a definition of truth by means of an empirical method? He must, if he wants to apply this method, and without bringing in for the present the pragmatic formula, first find particular cases from which he then generalizes. It is therefore in submitting conceptions to the control of experience, in the process of verifying them, that one finds examples of what is called truth. Therefore any philosopher who applies this empirical method, without the least prejudice in favor of pragmatic doctrine, can be led to conclude that truth "means" verification, or if one prefers, that verification either actual or possible, is the definition of truth.

In combining this conception of empirical

method with the theory of pragmatism, we come upon other important philosophical results. The classic theories of truth in terms of the coherence or compatibility of terms, and of the correspondence of an idea with a thing, hereby receive a new interpretation. A merely mental coherence without experimental verification does not enable us to get beyond the realm of hypothesis. If a notion or a theory makes pretense of corresponding to reality or to the facts, this pretense cannot be put to the test and confirmed or refuted except by causing it to pass over into the realm of action and by noting the results which it yields in the form of the concrete observable facts to which this notion or theory leads. If, in acting upon this notion, we are brought to the fact which it implies or which it demands, then this notion is true. A theory corresponds to the facts when it leads to the facts which are its consequences, by the intermediary of experience. And from this consideration the pragmatic generalization is drawn that all knowledge is prospective in its results, except in the case where notions and theories after having been first prospective in their application, have already been tried out and verified. Theoretically, however, even such verifications or truths could not be absolute. They would be based upon practical or moral certainty, but they are always subject to being corrected by unforeseen future consequences or by observed facts which had been disregarded. Every proposition concerning truths is really in the last analysis hypothetical and provisional, although a large number of these propositions have been so frequently verified without failure that we are justified in using them as if they were absolutely true. But logically absolute truth is an ideal which cannot be realized, at least not until all the facts have been registered, or as James says "bagged," and until it is no longer possible to make other observations and other experiences.

Pragmatism, thus, presents itself as an extension of historical empiricism, but with this fundamental difference, that it does not insist upon antecedent phenomena but upon consequent phenomena; not upon the precedents but upon the possibilities of action. And this change in point of view is almost revolutionary in its consequences. An empiricism which

is content with repeating facts already past has no place for possibility and for liberty. It cannot find room for general conceptions or ideas, at least no more than to consider them as summaries or records. But when we take the point of view of pragmatism we see that general ideas have a very different role to play than that of reporting and registering past experiences. They are the bases for organizing future observations and experiences. Whereas, for empiricism, in a world already constructed and determined, reason or general thought has no other meaning than that of summing up particular cases, in a world where the future is not a mere word, where theories, general notions, rational ideas have consequences for action, reason necessarily has a constructive function. Nevertheless the conceptions of reasoning have only a secondary interest in comparison with the reality of facts, since they must be confronted with concrete observations.8

Pragmatism thus has a metaphysical implication. The doctrine of the value of consequences leads us to take the future into consideration. And this taking into consideration of the future takes us to the conception of a universe whose evolution is not finished, of a universe which is still, in James' term, "in the making," "in the process of becoming," of a universe up to a certain point still plastic.

Consequently reason, or thought, in its more general sense, has a real, though limited function, a creative, constructive function. If we form general ideas and if we put them in action, consequences are produced which could not be produced otherwise. Under these conditions the world will be different from what it would have been if thought had not intervened. This consideration confirms the human and moral importance of thought and of its reflective operation in experience. It is therefore not true to say that James treated reason, thought and knowledge with contempt, or that he regarded them as mere means of gaining personal or even social profits. For him reason has a creative function, limited because specific, which helps to make the world other than it would have been without it. It makes the world really more reasonable; it gives to it an intrinsic value. One will understand the philosophy of James better if one considers it in its totality as a revision of English empiricism, a revision which replaces the value of past experience, of what is already given, by the future, by that which is as yet mere possibility.

These considerations naturally bring us to the movement called instrumentalism. The survey which we have just made of James' philosophy shows that he regarded conceptions and theories purely as instruments which can serve to constitute future facts in a specific manner. But James devoted himself primarily to the moral aspects of this theory, to the support which it gave to "meliorism" and moral idealism, and to the consequences which followed from it concerning the sentimental value and the bearing of various philosophical systems, particularly to its destructive implications for monistic rationalism and for absolutism in all its forms. He never attempted to develop a complete theory of the forms or "structures" and of the logical operations which are founded on this conception. Instrumentalism is an attempt to establish a precise logical theory of concepts, of judgments and inferences in their various forms, by considering primarily how thought functions in the experimental determinations of future consequences. That is to say, it attempts to establish universally recognized distinctions and rules of logic by deriving them from the reconstructive or mediative function ascribed to reason. It aims to constitute a theory of the general forms of conception and reasoning, and not of this or that particular judgment or concept related to its own content, or to its particular implications.

As far as the historical antecedents of instrumentalism are concerned, two factors are particularly important, over and above this matter of experimental verification which we have already mentioned in connection with James. The first of these two factors is psychological, and the second is a critique of the theory of knowledge and of logic which has resulted from the theory proposed by neo-Kantian idealism and expounded in the logical writings of such philosophers as Lotze, Bosanquet, and F. H. Bradley. As we have already said, neo-Kantian influence was very

marked in the United States during the last decade of the nineteenth century. I myself, and those who have collaborated with me in the exposition of instrumentalism, began by being neo-Kantians, in the same way that Peirce's point of departure was Kantianism and that of James was the empiricism of the British School.

The psychological tendencies which have exerted an influence on instrumentalism are of a biological rather than a physiological nature. They are, more or less, closely related to the important movement whose promoter in psychology has been Doctor John Watson and to which he has given the name of Behaviourism. Briefly, the point of departure of this theory is the conception of the brain as an organ for the coordination of sense stimuli (to which one should add modifications caused by habit, unconscious memory, or what are called today "conditioned reflexes") for the purpose of effecting appropriate motor responses. On the basis of the theory of organic evolution it is maintained that the analysis of intelligence and of its operations should be compatible with the order of known biological facts, concerning the intermediate position occupied by the central nervous system in making possible responses to the environment adequate to the needs of the living organism. It is particularly interesting to note that in the Studies in Logical Theory (1903), which was their first declaration, the instrumentalists recognized how much they owed to William James for having forged the instruments which they used, while at the same time, in the course of the studies, the authors constantly declared their belief in a close union of the "normative" principles of logic and the real processes of thought, in so far as these are determined by an objective or biological psychology and not by an introspective psychology of states of consciousness. But it is curious to note that the "instruments" to which allusion is made, are not the considerations which were of the greatest service to James. They precede his pragmatism and it is among some of the pages of his Principles of Psychology that one must look for them. This important work (1890) really developed two distinct theses.

The one is a re-interpretation of introspective psychology, in which James denies that

sensations, images and ideas are discrete and in which he replaces them by a continuous stream which he calls "the stream of consciousness." This conception necessitates a consideration of relations as an immediate part of the field of consciousness, having the same status as qualities. And throughout his *Psychology* James gives a philosophical tinge to this conception by using it in criticising the atomism of Locke and of Hume as well as the *a-priorism* of the synthesis of rational principles by Kant and his successors, among whom should be mentioned in England, Thomas Hill Green, who was then at the height of his influence.

The other aspect of his Principles of Psychology is of a biological nature. It shows itself in its full force in the criterion which James established for discovering the existence of mind. "The pursuance of future ends and the choice of means for their attainment are thus the mark and criterion of the presence of mentality in a phenomenon."9 The force of this criterion is plainly shown in the chapter on Attention, and its relation to Interest considered as the force which controls it, and its teleological function of selection and integration; in the chapter on Discrimination and Comparison (Analysis and Abstraction), where he discusses the way in which ends to be attained and the means for attaining them evoke and control intellectual analysis; and in the chapter on Conception, where he shows that a general idea is a mode of signifying particular things and not merely an abstraction from particular cases or a super-empirical function,—that it is a teleological instrument. Iames then develops this idea in the chapter on reasoning where he says that "the only meaning of essence is teleological, and that classification and conception are purely teleological weapons of mind."

One might complete this brief enumeration by mentioning also the chapter of James' book in which he discusses the Nature of Necessary Truths and the Effects of Experience, and affirms in opposition to Herbert Spencer, that many of our most important modes of perception and conception of the world of sensible objects are not the cumulative products of particular experience, but rather original biological sports, spontaneous variations

which are maintained because of their applicability to concrete experiences after once having been created. Number, space, time, resemblance and other important "categories" could have been brought into existence, he says, as a consequence of some particular cerebral instability, but they could by no means, have been registered on the mind by outside influence. Many significant and useless concepts also arise in the same manner. But the fundamental categories have been cumulatively extended and reinforced because of their value when applied to concrete instances and things of experience. It is therefore not the origin of a concept, it is its application which becomes the criterion of its value; and here we have the whole of pragmatism in embryo. A phrase of James' very well summarizes its import: "the popular notion that 'Science' is forced on the mind ab extra, and that our interests have nothing to do with its constructions, is utterly absurd."

Given the point of view which we have just specified, and the interest attaching to a logical theory of conception and judgment, and there results a theory of the following description. The adaptations made by inferior organisms, for example their effective and coordinated responses to stimuli, become teleological in man and therefore give occasion to thought. Reflection is an indirect response to the environment, and the element of indirection can itself become great and very complicated. But it has its origin in biological adaptive behaviour and the ultimate function of its cognitive aspect is a prospective control of the conditions of the environment. The function of intelligence is therefore not that of copying the objects of the environment, but rather of taking account of the way in which more effective and more profitable relations with these objects may be established in the future.

How this point of view has been applied to the theory of judgment is too long a story to be told here. We shall confine ourselves here to saying that, in general, the "subject" of a judgment represents that portion of the environment to which a reaction must be made; the predicate represents the possible response or habit or manner in which one should behave towards the environment; the copula represents the organic and concrete act by which the connection is made between the fact and its signification; and finally the conclusion, or the definitive object of judgment, is simply the original situation transformed, a situation which implies a change as well in the original subject (including its mind) as in the environment itself. The new and harmonious unity thus attained verifies the bearing of the data which were at first chosen to serve as subject and of the concepts introduced into the situation during the process as teleological instruments for its elaboration. Until this final unification is attained the perceptual data and the conceptual principles, theories, are merely hypotheses from a logical point of view. Moreover, affirmation and negation are intrinsically a-logical: they are acts.

Such a summary survey can hardly pretend to be either convincing or suggestive. However, in noting the points of resemblance and difference between this phase of pragmatism and the logic of neo-Hegelian idealism, we are bringing out a point of great importance. According to the latter logic, thought constitutes in the last analysis its object and even the universe. It is necessary to affirm the existence of a series of forms of judgment, because our first judgments, which are nearest to sense, succeed in constituting objects in only a partial and fragmentary fashion, even to the extent of involving in their nature an element of contradiction. There results a dialectic which permits each inferior and partial type of judgment to pass into a more complete form until we finally arrive at the total judgment where the thought which comprehends the entire object or the universe is an organic whole of interrelated mental distinctions. It is evident that this theory magnifies the role of thought beyond all proportion. It is an objective and rational idealism which is opposed to and distinct from the subjective and perceptual idealism of Berkeley's school. Instrumentalism, however, assigns a positive function to thought, that of reconstituting the present stage of things instead of merely knowing it. As a consequence, there cannot be intrinsic degrees, or a hierarchy of forms of judgments. Each type has its own end, and its validity is entirely determined by its efficacy in the pursuit of its end. A limited perceptual judgment, adapted to the situation which has given it birth, is as true in its place as is the most complete and significant philosophic or scientific judgment. Logic, therefore, leads to a realistic metaphysics in so far as it accepts things and events for what they are independently of thought, and to an idealistic metaphysics in so far as it contends that thought gives birth to distinctive acts which modify future facts and events in such a way as to render them more reasonable, that is to say, more adequate to the ends which we propose for ourselves. This ideal element is more and more accentuated by the inclusion progressively of social factors in human environment over and above natural factors; so that the needs which are fulfilled, the ends which are attained are no longer of a merely biological or particular character, but include also the ends and activities of other members of society.

It is natural that continental thinkers should be interested in American philosophy as it reflects, in a certain sense, American life. Thus it should be clear after this rapid survey of the history of pragmatism that American thought continues European thought. We have imported our language, our laws, our institutions, our morals, and our religion from Europe, and we have adapted them to the new conditions of our life. The same is true of our ideas. For long years our philosophical thought was merely an echo of European thought. The pragmatic movement which we have traced in the present essay as well as neo-realism, behaviourism, the absolute idealism of Royce, the naturalistic idealism of Santayana, are all attempts at re-adaptation; but they are not creations de novo. They have their roots in British and European thought. Since these systems are re-adaptations they take into consideration the distinctive traits of the environment of American life. But as has already been said, they are not limited to reproducing what is worn and imperfect in this environment. They do not aim to glorify the energy and the love of action which the new conditions of American life exaggerated. They do not reflect the excessive mercantilism of American life. Without doubt all these traits of the environment have not been without a certain influence on Ameri-

can philosophical thought; our philosophy would not be national or spontaneous if it were not subject to this influence. But the fundamental idea which the movements of which we have just spoken, have attempted to express, is the idea that action and opportunity justify themselves only to the degree in which they render life more reasonable and increase its value. Instrumentalism maintains in opposition to many contrary tendencies in the American environment, that action should be intelligent and reflective, and that thought should occupy a central position in life. That is the reason for our insistence on the teleological phase of thought and knowledge. If it must be teleological in particular and not merely true in the abstract, that is probably due to the practical element which is found in all the phases of American life. However that may be, what we insist upon above all else is that intelligence be regarded as the only source and sole guarantee of a desirable and happy future. It is beyond doubt that the progressive and unstable character of American life and civilization has facilitated the birth of a philosophy which regards the world as being in continuous formation, where there is still place for indeterminism, for the new and for a real future. But this idea is not exclusively American, although the conditions of American life have aided this idea in becoming self-conscious. It is also true that Americans tend to underestimate the value of tradition and of rationality considered as an achievement of the past. But the world has also given proof of irrationality in the past and this irrationality is incorporated in our beliefs and our institutions. There are bad traditions as there are good ones: it is always important to distinguish. Our neglect of the traditions of the past, with whatever this negligence implies in the way of spiritual impoverishment of our life, has its compensation in the idea that the world is re-commencing and being re-made under our eyes. The future as well as the past can be a source of interest and consolation and give meaning to the present. Pragmatism and instrumental experimentalism bring into prominence the importance of the individual. It is he who is the carrier of creative thought, the author of action, and of its application. Subjectivism is an old story in philosophy; a story which began in Europe and not in America. But American philosophy, in the systems which we have expounded, has given to the subject, to the individual mind, a practical rather than an epistemological function. The individual mind is important because only the individual mind is the organ of modifications in traditions and institutions, the vehicle of experimental creation. One-sided and egoistic individualism in American life has left its imprint on our practices. For better or for worse, depending on the point of view, it has transformed the esthetic and fixed individualism of the old European culture into an active individualism. But the idea of a society of individuals is not foreign to American thought; it penetrates even our current individualism which is unreflective and brutal. And the individual which American thought idealises is not an individual per se, an individual fixed in isolation and set up for himself, but an individual who evolves and develops in a natural and human environment, an individual who can be educated.

If I were asked to give an historical parallel to this movement in American thought I would remind my reader of the French philosophy of the enlightenment. Every one knows that the thinkers who made that movement illustrious were inspired by Bacon, Locke, and Newton: what interested them was the application of scientific method and the conclusions of an experimental theory of knowledge to human affairs, the critique and reconstruction of beliefs and institutions. As Höffding writes, they were animated by "a fervent faith in intelligence, progress, and humanity." And certainly they are not accused today, just because of their educational and social significance, of having sought to subordinate intelligence and science to ordinary utilitarian aims. They merely sought to free intelligence from its impurities and to render it sovereign. One can scarcely say that those who glorify intelligence and reason in the abstract, because of their value for those who find personal satisfaction in their possession, estimate intelligence more truly than those who wish to make it the indispensable guide of intellectual and social life. When an American critic says of instrumentalism that it regards ideas as mere servants which make for

success in life, he only reacts, without reflection, to the ordinary verbal associations of the word "instrumental," as many others have reacted in the same manner to the use of the word "practical." Similarly a recent Italian writer after having said that pragmatism and instrumentalism are characteristic products of American thought, adds that these systems "regard intelligence as a mere mechanism of belief, and consequently attempt to re-establish the dignity of reason by making of it a machine for the production of beliefs useful to morals and society." This criticism does not hold. It is by no means the production of beliefs useful to morals and society which these systems pursue. It is the formation of a faith in intelligence, as the one and indispensable belief necessary to moral and social life. The more one appreciates the intrinsic esthetic, immediate value of thought and of science, the more one takes into account what intelligence itself adds to the joy and dignity of life, the more one should feel grieved at a situation in which the exercise and joy of reason are limited to a narrow, closed and technical social group and the more one should ask how it is possible to make all men partici-

NOTES

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pators in this inestimable wealth.

(New York: Columbia University Press, 1925), 2:353–77. LW 2:3–21.]

- 1. Monist, vol. 15, p. 163.
- 2. Monist, vol. 15, p. 162.
- 3. Popular Science Monthly, 1878.
- 4. Monist, vol. 15, pp. 173-74.
- 5. Monist, vol. 15, p. 178.
- 6. Collected Essays and Reviews, p. 412.
- 7. The Meaning of Truth, pp. 209-211. In a footnote James gave an example of the errors which are committed in connection with the term "Practical," quoting M. Bourdeau who had written that "Pragmatism is an Anglo-Saxon reaction against the intellectualism and rationalism of the Latin mind. . . . It is a philosophy without words, a philosophy of gestures and of acts, which abandons what is general and holds only to what is particular." In his lecture at California, James brought out the idea that his pragmatism was inspired to a considerable extent by the thought of the British philosophers, Locke, Berkeley, Hume, Mill, Bain, and Shadworth Hodgson. But he contrasted this method with German transcendentalism, and particularly with that of Kant. It is especially interesting to notice this difference between Peirce and James: the former attempted to give an experimental, not an a priori interpretation of Kant, whereas James tried to develop the point of view of the British thinkers.
- 8. William James said, in a happy metaphor, that they must be "cashed in," by producing specific consequences. This expression means that they must be able to lead to concrete facts. But for those who are not familiar with American idioms, James' formula was taken to mean that the consequences themselves of our rational conceptions must be narrowly limited by their pecuniary value. Thus Mr. Bertrand Russell wrote recently that pragmatism is merely a manifestation of American commercialism.
 - 9. Psychology, vol. 1, p. 8.