Naturalism, as it is understood in philosophical usage, has three distinguishable connotations, all of which have in common the meaning of an attempted speculative explanation of every component of experience by means of existences and forces which are viewed as natural or mundane, the latter conceptions being understood as excluding everything which may be regarded as spiritual or transcendental. The three meanings of the term may be classified as, a. general, b. Materialism, and c. Positivism. We shall proceed to a brief consideration of these three meanings.

a. In its more general and less objectionable sense, Naturalism is the more or less philosophical view which attempts to explain everything by reference to natural causes or processes in the sense of that which is normal. It thus eliminates as a factor in explanation any event or process which may be called supernatural or supernormal. It consequently excludes any interpretation which may be based upon the miraculous, mystical insight, or enlightenment, and, in general, any factor which may be viewed as transcendental. But, in this sense, Naturalism does not imply an attempt to explain everything in exclusively physical terms, particularly mechanistic physical terms. Mental and biological phenomena, as they are found to exist normally, are accepted as natural, though reducible to ultimate physical conceptions. Thus, the emphasis is upon the norm rather than upon the conception of the ultimate reducibility of everything to matter and force. Naturalism, in this sense, is very widespread and appears to be the normal view among the professional classes whose orientation is to natural science either in the pure or applied sense.

Naturalism, in this most general sense, can and does have positive value as long as it is viewed as no more than an heuristic principle. It often serves as a salutary protection against over-imaginative and superstitious tendencies and attitudes, which are often far from wholesome. But this positive value is lost and this Naturalism may and does become actively malicious when, instead of serving as a simple heuristic principle, it is raised to the dogmatic thesis that the natural is the all in all—capable of serving as the ground of interpretation of all elements and complexes of human experience.
The naturalistic attitude is of very wide occurrence among biologists, psychologists, and sociologists of the present day, as well as in the engineering profession. But it appears as an interesting and very significant fact that the naturalistic tendency appears to be weakening among those who form the vanguard of that most advanced of natural sciences, namely, physics. Much in modern physics sounds even more like Transcendentalism than like Naturalism. Perhaps the other professional groups may discover the implications of this tendency in another century or so.

b. In contrast to Naturalism in the first sense, that may mean only an heuristic attitude, Materialism is a metaphysical theory. It is, “That metaphysical theory which regards all the facts of the universe as sufficiently explained by the assumption of body and matter, conceived as extended, impenetrable, eternally existent, and susceptible of movement or change of relative position.” In particular, Materialism attempts to explain all phenomena, including psychical phenomena and the phenomena of consciousness in general, in terms of transformations of material molecules. It was Materialists who said that thought was secreted by the brain as bile is secreted by the liver and that man is what he eats. On the whole, the materialistic philosophy is so crude, undiscerning, and uncritical that it scarcely rates serious philosophical attention. Today, pure natural scientists, though often Naturalists in the philosophical sense, are only exceptionally crude Materialists, for they know too well the essentially postulational character of their concepts to fall into the error of hypostatizing them into absolute metaphysical existences.

However, while true scientists are rarely philosophical Materialists, nonetheless Materialism is today of enormous importance in the field of sociological theory and practice. The vast current of Marxism or so-called scientific socialism is explicitly and dynamically materialistic. In fact, it is even designated “dialectic materialism.” But here we have a materialism which is not quite identical with the mechanistic materialism of the above definition, nor is it wholly identical with the biological materialism that has grown out of the findings and teachings of Charles Darwin. However, Marxism is explicitly materialistic in three specific senses which are of philosophic importance:

1. It affirms an anti-positivistic, realistic epistemology. The meaning intended is rendered explicit by a quotation from Lenin, who has said: “For the sole ‘property’ of matter—with the recognition of which materialism is vitally concerned—is the property of being objective reality, of existing outside our cognition.” While the phrase “existing outside our cognition” does not by itself necessarily mean existing outside consciousness in every sense, yet the general context of dialectic materialism reveals that this is implied. Further, since the standpoint is non-positivistic, the complete implication is of an independent self-existent matter. This is enough to define an essential materialism.

1 Quoted from Baldwin’s Dictionary of Philosophy and Psychology.
2. Marxism especially affirms a dialectical movement in nature and society which is explicitly conceived in the materialistic sense. The conception of the dialectical movement was taken from the philosophy of Hegel but given a radically inverted meaning. This is evident from the following quotation from Karl Marx: “For Hegel the thought process, which he transforms into an independent subject under the name idea, is the creator of the real, which forms only its external manifestation. With me, on the contrary, the ideal is nothing else than the material transformed and translated in the human brain.”

3. Marxism affirms the labor theory of value, which means that value is produced by labor in such a sense that all productive activity, whether manual or mental, can be reduced to some multiple of the simplest form of manual production. This conception is by no means original with Marx, but its implications are carried out by him with the greatest consistency. It stands opposed to the psychological theory of value in which it is affirmed that it is human desire which gives value to produced objects, a view essentially non-materialistic since a factor in consciousness is regarded as the value-producing determinant. One consequence of this view is that, in the Marxist program, exercise of individual wish or preference in the consumption of economic objects tends to be curbed, since the value to be consumed is produced by labor, not by the desire of the consumer.

While most ideological materialism, as distinguished from practical non-reflective materialism, is not an important social or philosophical force, yet in the Marxist form it is today an extremely important social, political, and economic movement. We have now a rare opportunity for observing just what materialism in action can and does mean. The ethical characteristics of this movement, as actually revealed, are not something extraneous added to the original idea. The student of dialectic materialism, who is familiar with the enunciations of Marx and Lenin, is rather impressed with the consistency of the development. We have, in deed, a rare opportunity for a pragmatic evaluation of materialism in action.

[The end of the discussion of Naturalism under the form of Materialism.]

c. The third, and philosophically more important form of Naturalism, is that which is known as Positivism. Positivism differs from Materialism in that it does not hypostatize the conceptual entities of physical science into substantive metaphysical existences. It is no less grounded upon natural science than Materialism, but it may be said to be oriented to the method of science rather than to the substantive content of science. It is essentially: “The theory that the whole of the universe or of experience may be accounted for by a method like that of the physical sciences, and with recourse only to the current conceptions of physical and natural science; more specifically, that mental and moral processes may be reduced to the terms and categories of the natural sciences. It is best defined

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2 Quoted from article on “Socialism” in ninth edition of The Encyclopaedia Britannica.
negatively as that which excludes everything distinctly spiritual or transcendental.\textsuperscript{3} It is thus evident that Positivism excludes, in theory at least, from the realm of valid knowledge every element that is \textit{a priori} or speculative. Also, since it views the terms, categories, and methods of science as the exclusively valid source of knowledge, it provides no place for a kind of knowledge which may be derived from a third or other ways of cognition.

Commonly the word ‘Positivism’ is associated most closely with the name of Auguste Comte, but in terms of the more generalized meaning given here, it is not so restricted. Thus, in this wider sense, Locke, Hume, and Spencer are Positivists, as well as several other thinkers who, while naturalistic in their orientation, are yet too critical in their thinking to fall into the naive errors of Materialism. Positivism may be said to differ from naturalism in the first sense largely in that it is more systematically and philosophically developed.

Of all philosophies, Positivism is probably most closely married to natural science. However, it differs from the special sciences in that it extends or extrapolates their methods into ultimately and exclusively valid means for the attainment of knowledge. The program of the special sciences is much less pretentious in that each merely integrates its knowledge of fact by means of hypothesized postulates which possess only a pragmatic validity that may, indeed, have no more than a transitory life. Thus the special sciences cannot lay claim to having discovered the true truth of phenomena, but only \textit{warranted assertibility}, to use the term of John Dewey. The question as to whether warranted assertibility is the final possibility of knowledge cannot be answered by any of the special sciences. This is preeminently a question for philosophy, and, before the latter can hope to achieve an ultimately satisfactory answer, it must at least consider the claim that there is such a thing as a mystic or gnostic cognition falling quite outside the methodology of all natural science. At any rate, Positivism is a philosophy which, basing itself on scientific method, affirms that the warranted assertibility of science is the last word of positive knowledge that is possible.

Positivism does not so much assert that there is no metaphysical or noumenal reality as to take an agnostic attitude with respect to the possibility of such an existence. At times, as in the case of Spencer, it is simply called the Unknowable, and then dropped as not relevant for human concerns. We can readily agree that such a noumenal Reality is unknowable by the cognitive methods of natural science, and if the Positivist meant no more than this he would be correct enough. But he goes further and both dogmatically and arbitrarily affirms that the scientific form of cognition is the only possible form of cognition, and thus the unknowable for natural science is an absolute Unknowable of which we cannot even predicate substantive existence.

A critique of Positivism involves more than a critique of natural science, for the latter critique does not resolve the question as to whether the scientific form of cognition is the only possible form of knowledge. It gives a delimitation and

\textsuperscript{3} Quoted from Baldwin’s \textit{Dictionary of Philosophy and Psychology}.  

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valuation of scientific knowledge as such, and, in general, affords us an objective perspective with respect to it. It can be contrasted with other, at least supposed, kinds of knowledge such as Gnosticism, and so we are enabled to see just what science is. So far we have determined that warranted assertibility is the last word of natural science, but we have not ascertained that warranted assertibility is the final possibility of all knowledge. However, it is just the question as to whether warranted assertibility is final that constitutes the crux of the critique of Positivism and, indeed, of Naturalism as a whole. In general, the Positivists have not dealt with this question, or at least they have not done so adequately.

One may perhaps suggest that it is possible to investigate the problem as to whether there is an extra-scientific way of knowledge in the scientific spirit. Would not such a procedure be more in conformity with the fundamental assumption of Positivism than that of dogmatic affirmation without investigation? A way or ways of cognition could conceivably be a proper object of scientific study. To be sure, a positive finding of such a study would be in the form of a warranted assertibility, since this is all that scientific method can give, but it would be a scientific recognition that a way of cognition other than scientific cognition probably exists. And such a recognition would give the same justification for at least the attempt in the form of practical procedure in terms of the probably existent way of cognition that science gives for such procedure in other fields. Such an additional way of cognition could not become part and parcel of scientific cognition without altering the form and nature of scientific knowledge more or less radically, but at least the factuality of other possibilities of cognition would be determined as far as is possible for natural science.

As a matter of fact, there exists today, and has existed for some years, a study of the type suggested above. I refer to the investigation of extrasensory perception. The subject-matter of this study has embraced telepathy, clairvoyance, precognition, and telekinesis, and, while these supposed functions or faculties involve less than the cognition implied in the notion of a gnostic knowledge, yet, if existent, they transcend in their content and procedure the way of cognition of natural science. The results of this investigation to date have been strongly positive, but the conclusions have been reported in the form of a warranted assertibility rather than as a categorical judgment, as is quite sound. But the degree of assertibility is represented as an explicit mathematical probability which is rendered possible by the methods employed. It is difficult to see how the results of these experiments can be seriously questioned as long as the theory of the mathematics of probability is viewed as sound. The final consequence of this research is that we may view the factuality of extrasensory perception scientifically established to a degree of reliability that is not inferior to much of the body of general scientific knowledge.

What becomes of the positivistic assumption that the only type of possible knowledge is the scientific kind of knowledge when science establishes, in the sense of this knowledge, the factuality of a non-scientific type of knowledge? For now doubting the factuality of this non-scientific kind of knowledge implies a doubt of the reliability of scientific knowledge itself. There are those who
have found this dilemma quite disturbing. The alternatives are either a thoroughgoing agnosticism with respect to all cognition, including scientific knowledge, or the positive acceptance in principle of non-scientific cognition along with scientific knowledge.

The conclusion which seems to be constrained by the foregoing argument is that Positivism, in so far as it asserts or implies the categorical denial of the possibility of a metaphysical, transcendental, or spiritual knowledge, is simply unsound, and stands condemned by the voice of the science to which it appeals for its authority. For the establishment by scientific method of the factuality of a non-scientific kind of cognition of any sort simply forces ajar the door of possibility for any other sort of non-scientific cognition for which existential claims may be advanced, particularly if made by individuals of proven intellectual competency. However, Positivism may well remain valid as an heuristic intellectual attitude, provided it is reasonably flexible; and it may render valuable service as a check against a too active and too credulous will-to-believe. Beyond all doubt, scientific method is a valuable monitor of human cognition so long as it does not presumptuously arrogate to itself the voice of an authoritarian dictator.

Viewing Naturalism as a whole, rather than in terms of its three specific forms, we can identify its general cardinal principle as Realism. By Realism in the modern, as distinguished from the medieval, sense is meant: “. . . the doctrine that reality exists apart from its presentation to, or conception by, consciousness; or that if, as a matter of fact, it has no separate existence to the divine consciousness, it is not in virtue of anything appertaining to consciousness as such.”4 Realism is the view that ultimate reality is not consciousness nor dependent upon consciousness for its existence. But Realism is not simply another name for Naturalism, as it has a much wider comprehension; in fact, the philosophic school known as the New Realism and the, perhaps, more developed wing of Pragmatism would have to be classed with Naturalism in this respect. Of the three schools, Naturalism is the most obviously and intensely realistic, and thus stands at the opposite pole with respect to Idealism. Also, of all the types of philosophy which have developed in the West, it stands in the strongest contrast to the thesis affirmed in the second part of the present work. It will, therefore, be necessary to prepare the ground for the present philosophy by a polemical examination of these opposed realistic systems, but inasmuch as this critique will be centered upon the realistic standpoint, as such, it is postponed until we take up the discussion of the New Realism.

As is in general true of all schools of philosophy, Naturalism has features in which it is relatively strong and offers a positive contribution and even attitude, but it is no less marked by inadequacy with respect to its treatment and offering in other respects. With regard to its contribution relative to the factual or empiric side of science, it does have a degree of positive value, provided its too categorical and unsound generalizations are properly pruned. But even as a development grounded in natural science, Naturalism fails to consider, or at least to consider adequately, phases or aspects or perspectives which are ineluctable parts of the total discipline or meaning which we agree to call

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4 Quoted from Baldwin’s *Dictionary of Philosophy and Psychology*. 

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science, and which are of no less importance than the empiric or factual. Science is not simply a body of empiric fact; it is, as well, a logically organized conceptual system, grounded upon a particular kind of orientation of consciousness. It is thus a compound of fact, system, and orientation. As a consequence, an adequate scientifically grounded philosophy must deal with the systematic and orientational as well as the factual aspects of the scientific totality. It must incorporate a critique and due appreciation of the orientational and systematic, or logical, components as well as an appreciation of the purely factual. This Naturalism fails to do, or at least fails to do in adequate terms. By this it is not meant that naturalistic philosophers lack orientation or are necessarily deficient in logical capacity, but rather, that they fail, more or less completely, to consider logic and orientation as objects for critical examination and evaluation. In this respect the remaining three schools of philosophy are more complete, and, therefore, sounder.

Even as a philosophy based upon the factual side of science, Naturalism, in the technical sense, is incomplete, for its general orientation is to those branches of science known as “physical.” It would be possible for a naturalistic philosophy to be oriented to the biological sciences, or even to the sum total of all forms of science. We would thus have a broader and sounder Naturalism, and, in fact, we do find a considerable degree of this enriched Naturalism in both Neo-Realism and Pragmatism. Indeed, much of Pragmatism may be viewed as a Naturalism primarily based upon the biological sciences. But in this respect technical Naturalism is highly deficient.

If we are to consider man in the totality of his consciousness, experience, interest, attitude, and so forth, as constituting the proper subject-matter for philosophy, then any philosophic system which is exclusively oriented to the scientific dimension of human interest is far from complete. For human consciousness as a comprehensive whole cannot be equated with that part of it which is scientific in its orientation. Man is a vital and mental being as well as an embodied creature, and in these larger dimensions of his nature he has interests and attitudes, both rational and irrational, that are not comprehensively embraced by the scientific dimension of his total interest. Thus there are dimensions of human consciousness, such as the ethical, aesthetic, the spiritual or religious, and so forth, that are essentially other than science. To be sure, all these aspects of the complete consciousness of man, with their objective manifestations, may be and have been objects for scientific study. But the last word of science here is of value only as giving objective factuality and nothing of the inner meaning. On the other hand, philosophy is in duty bound to deal, in so far as lies in its power, with this inner content as well as with the objective factuality. In this respect Naturalism, in the technical sense, is almost a complete failure. References to this other side of man are to be found in the writings of the Naturalists but not in such a way as true insight would dictate. It was a Naturalist who said: “Religion is the opiate of the masses.” Now, while there have undoubtedly been manifestations classed as religious which are little better than an opiate, yet to judge religion as a whole in such a way is just as stupid as the evaluation of a savage who regards a mechanistic construction of applied science as a form of ceremonial magic. In these dimensions Naturalism fails, sometimes even egregiously, and so we may leave this subject, giving due appreciation for the positive contributions of this school, but recognizing its more notable inadequacies and incompetencies.
[The end of Chapter 3 of PART III of *The Philosophy of Consciousness Without an Object.*]