The Need for a Recovery of Philosophy*

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Intellectual advance occurs in two ways. At times increase of knowledge is organized about old conceptions, while these are expanded, elaborated and refined, but not seriously revised, much less abandoned. At other times, the increase of knowledge demands qualitative rather than quantitative change; alteration, not addition. Men's minds grow cold to their former intellectual concerns; ideas that were burning fade; interests that were urgent seem remote. Men face in another direction; their older perplexities are unreal; considerations passed over as negligible loom up. Former problems may not have been solved, but they no longer press for solutions.

Philosophy is no exception to the rule. But it is unusually conservative—not, necessarily, in proffering solutions, but in clinging to problems. It has been so allied with theology and theological morals as representatives of men's chief interests, that radical alteration has been shocking. Men's activities took a decidedly new turn, for example, in the seventeenth century, and it seems as if philosophy, under the lead of thinkers like Bacon and Descartes, was to execute an about-face. But, in spite of the ferment, it turned out that many of the older problems were but translated from Latin into the vernacular or into the new terminology furnished by science.

The association of philosophy with academic teaching has reinforced this intrinsic conservatism. Scholastic philosophy persisted in universities after men's thoughts outside of the walls of colleges had moved in other directions. In the last hundred years intellectual advances of science and politics have in like fashion been crystallized into material of instruction and now resist further change. I would not say that the spirit of teaching is hostile to that of liberal inquiry, but a philosophy which exists largely as something to be taught rather than wholly as something to be reflected upon is conducive to discussion of views held by others rather than to immediate response. Philosophy when taught inevitably magnifies the history of past thought, and leads professional philosophers to approach their subject-matter through its formulation in received systems. It tends, also, to emphasize points upon which men have divided into schools, for these lend themselves to retrospective definition and elaboration. Consequently,

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philosophical discussion is likely to be a dressing out of antithetical traditions, where criticism of one view is thought to afford proof of the truth of its opposite (as if formulation of views guaranteed logical exclusives). Direct preoccupation with contemporary difficulties is left to literature and politics.

If changing conduct and expanding knowledge ever required a willingness to surrender not merely old solutions but old problems it is now. I do not mean that we can turn abruptly away from all traditional issues. This is impossible; it would be the undoing of the one who attempted it. Irrespective of the professionalizing of philosophy, the ideas philosophers discuss are still those in which Western civilization has been bred. They are in the backs of the heads of educated people. But what serious-minded men not engaged in the professional business of philosophy most want to know is what modifications and abandonments of intellectual inheritance are required by the newer industrial, political, and scientific movements. They want to know what these newer movements mean when translated into general ideas. Unless professional philosophy can mobilize itself sufficiently to assist in this clarification and redirection of men's thoughts, it is likely to get more and more sidetracked from the main currents of contemporary life.

This essay may, then, be looked upon as an attempt to forward the emancipation of philosophy from too intimate and exclusive attachment to traditional problems. It is not in intent a criticism of various solutions that have been offered, but raises a question *as to the genuineness, under the present conditions of science and social life, of the problems.*

The limited object of my discussion will, doubtless, give an exaggerated impression of my conviction as to the artificiality of much recent philosophizing. Not that I have wilfully exaggerated in what I have said, but that the limitations of my purpose have led me not to say many things pertinent to a broader purpose. A discussion less restricted would strive to enforce the genuineness, in their own context, of questions now discussed mainly because they have been discussed rather than because contemporary conditions of life suggest them. It would also be a grateful task to dwell upon the precious contributions made by philosophic systems which as a whole are impossible. In the course of the development of unreal premises and the discussion of artificial problems, points of view have emerged which are indispensable possessions of culture. The horizon has been widened; ideas of great fecundity struck out; imagination quickened; a sense of the meaning of things created. It may even be asked whether these accompaniments of classic systems have not often been treated as a kind of guarantee of the systems themselves. But while it is a sign of an illiberal mind to throw away the fertile and ample ideas of a Spinoza, a Kant, or a Hegel, because their setting is not logically adequate, is surely a sign of an undisciplined one to treat their contributions to culture as confirmations of premises with which they have no necessary connection.

I

A criticism of current philosophizing from the standpoint of the traditional quality of its problems must begin somewhere, and the choice of a beginning is arbitrary. It has appeared to me that the notion of experience implied in the questions most actively discussed gives a natural point of departure. For, if I mistake not, it is just the inherited view of experience common to the empirical school and its opponents which keeps alive many discussions even of matters that on their face are quite remote from it, while it is also this view which is most untenable in the light of existing science and social practice. Accordingly I set out with a brief statement of some of the chief contrasts between the orthodox description of experience and that congenial to present conditions.

(i) In the orthodox view, experience is regarded primarily as a knowledge-affair. But to eyes not looking through ancient spectacles, it assuredly appears as an affair of the intercourse of a living being with its physical and social environment. (ii) According to tradition experience is (at least primarily) a psychical thing, infected throughout by "subjectivity." What experience suggests about itself is a genuinely objective world which enters into the actions and sufferings of men and undergoes modifications through their responses. (iii) So far as anything beyond a bare present is recognized by the established doctrine, the past exclusively counts. Registration of what has taken place, reference to precedent, is believed to be the essence of experience. Empiricism is conceived of as tied up to what has been, or is, "given." But experience in its vital form is experimental, an effort to change the given; it is characterized by projection, by reaching forward into the unknown; connexion with a future is its salient trait. (iv) The empirical tradition is committed to particularism. Connexions and continuities are supposed to be foreign to experience, to be by-products of dubious validity. An experience that is an undergoing of an environment and a striving for its control in new directions is pregnant with connexions. (v) In the traditional notion experience and thought are antithetical terms. Inference, so far as it is other than a revival of what has been given in the past, goes beyond experience; hence it is either invalid, or else a measure of desperation by which, using experience as a springboard, we jump out to a world of stable things and other selves. But experience, taken free of the restrictions imposed by the older concept, is full of inference. There is, apparently, no conscious experience without inference; reflection is native and constant.

These contrasts, with a consideration of the effect of substituting the account of experience relevant to modern life for the inherited account, afford the subject-matter of the following discussion.

Suppose we take seriously the contribution made to our idea of experience by biology,—not that recent biological science discovered the facts, but that it has so emphasized them that there is no longer an excuse for ignoring them or treating them as negligible. Any account of experience must now fit into the consideration that experiencing means living; and that living goes on in and because of an environing medium, not in a vacuum. Where there is experience, there is a living being. Where there is life, there is a double connexion maintained with

the environment. In part, environmental energies constitute organic functions; they enter into them. Life is not possible without such direct support by the environment. But while all organic changes depend upon the natural energies of the environment for their origination and occurrence, the natural energies sometimes carry the organic functions prosperously forward, and sometimes act counter to their continuance. Growth and decay, health and disease, are alike continuous with activities of the natural surroundings. The difference lies in the bearing of what happens upon future life-activity. From the standpoint of this future reference environmental incidents fall into groups: those favorable to life-activities, and those hostile.

The successful activities of the organism, those within which environmental assistance is incorporated, react upon the environment to bring about modifications favorable to their own future. The human being has upon his hands the problem of responding to what is going on around him so that these changes will take one turn rather than another, namely, that required by its own further functioning. While backed in part by the environment, its life is anything but a peaceful exhalation of environment. It is obliged to struggle—that is to say, to employ the direct support given by the environment in order indirectly to effect changes that would not otherwise occur. In this sense, life goes on by means of controlling the environment. Its activities must change the changes going on around it; they must neutralize hostile occurrences; they must transform neutral events into coöperative factors or into an efflorescence of new features.

Dialectic developments of the notion of self-preservation, of the *conatus essendi*, often ignore all the important facts of the actual process. They argue as if self-control, self-development, went on directly as a sort of unrolling push from within. But life endures only in virtue of the support of the environment. And since the environment is only incompletely enlisted in our behalf, self-preservation—or self-realization or whatever—is always indirect—always an affair of the way in which our present activities affect the direction taken by independent changes in the surroundings. Hindrances must be turned into means.

We are also given to playing loose with the conception of adjustment, as if that meant something fixed—a kind of accommodation once for all (ideally at least) of the organism *to* an environment. But as life requires the fitness of the environment to the organic functions, adjustment to the environment means not passive acceptance of the latter, but acting so that the environing changes take a certain turn. The "higher" the type of life, the more adjustment takes the form of an adjusting of the factors of the environment to one another in the interest of life; the less the significance of living, the more it becomes an adjustment to a given environment till at the lower end of the scale the differences between living and the non-living disappear.

These statements are of an external kind. They are about the conditions of experience, rather than about experiencing itself. But assuredly experience as it concretely takes place bears out the statements. Experience is primarily a process of undergoing: a process of standing something; of suffering and passion, of affection, in the literal sense of these words. The organism has to endure, to undergo, the consequences of its own actions. Experience is no slipping along

in a path fixed by inner consciousness. Private consciousness is an incidental outcome of experience of a vital objective sort; it is not its source. Undergoing, however, is never mere passivity. The most patient patient is more than a receptor. He is also an agent—a reactor, one trying experiments, one concerned with undergoing in a way which may influence what is still to happen. Sheer endurance, side-stepping evasions, are, after all, ways of treating the environment with a view to what such treatment will accomplish. Even if we shut ourselves up in the most clam-like fashion, we are doing something; our passivity is an active attitude, not an extinction of response. Just as there is no assertive action, no aggressive attack upon things as they are, which is all action, so there is no undergoing which is not on our part also a going on and a going through.

Experience, in other words, is a matter of *simultaneous* doings and sufferings. Our undergoings are experiments in varying the course of events; our active tryings are trials and tests of ourselves. This duplicity of experience shows itself in our happiness and misery, our successes and failures. Triumphs are dangerous when dwelt upon or lived off from; successes use themselves up. Any achieved equilibrium of adjustment with the environment is precarious because we cannot evenly keep pace with changes in the environment. These are so opposed in direction that we must choose. We must take the risk of casting in our lot with one movement or the other. Nothing can eliminate all risk, all adventure; the one thing doomed to failure is to try to keep even with the whole environment at once—that is to say, to maintain the happy moment when all things go our way.

The obstacles which confront us are stimuli to variation, to novel response, and hence are occasions of progress. If a favor done us by the environment conceals a threat, so its disfavor is a potential means of hitherto unexperienced modes of success. To treat misery as anything but misery, as for example a blessing in disguise or a necessary factor in good, is disingenuous apologetics. But to say that the progress of the race has been stimulated by ills undergone, and that men have been moved by what they suffer to search out new and better courses of action is to speak veraciously.

The preoccupation of experience with things which are coming (are now coming, not just to come) is obvious to any one whose interest in experience is empirical. Since we live forward; since we live in a world where changes are going on whose issue means our weal or woe; since every act of ours modifies these changes and hence is fraught with promise, or charged with hostile energies—what should experience be but a future implicated in a present! Adjustment is no timeless state; it is a continuing process. To say that a change takes time may be to say something about the event which is external and uninstructive. But adjustment of organism to environment takes time in the pregnant sense; every step in the process is conditioned by reference to further changes which it effects. What is going on in the environment is the concern of the organism; not what is already "there" in accomplished and finished form. In so far as the issue of what is going on may be affected by intervention of the organism, the moving event is a challenge which stretches the agent-patient to meet what is coming. Experiencing exhibits things in their unterminated aspect moving toward determinate conclusions. The finished and done with is of import as

affecting the future, not on its own account: in short, because it is not, really, done with.

Anticipation is therefore more primary than recollection; projection than summoning of the past; the prospective than the retrospective. Given a world like that in which we live, a world in which environing changes are partly favorable and partly callously indifferent, and experience is bound to be prospective in import; for any control attainable by the living creature depends upon what is done to alter the state of things. Success and failure are the primary "categories" of life; achieving of good and averting of ill are its supreme interests; hope and anxiety (which are not self-enclosed states of feeling, but active attitudes of welcome and wariness) are dominant qualities of experience. Imaginative forecast of the future is this forerunning quality of behavior rendered available for guidance in the present. Day-dreaming and castle-building and esthetic realization of what is not practically achieved are offshoots of this practical trait, or else practical intelligence is a chastened fantasy. It makes little difference. Imaginative recovery of the bygone is indispensable to successful invasion of the future, but its status is that of an instrument. To ignore its import is the sign of an undisciplined agent; but to isolate the past, dwelling upon it for its own sake and giving it the eulogistic name of knowledge, is to substitute the reminiscence of old-age for effective intelligence. The movement of the agent-patient to meet the future is partial and passionate; yet detached and impartial study of the past is the only alternative to luck in assuring success to passion.

II

This description of experience would be but a rhapsodic celebration of the commonplace were it not in marked contrast to orthodox philosophical accounts. The contrast indicates that traditional accounts have not been empirical, but have been deductions, from unnamed premises, of what experience *must* be. Historic empiricism has been empirical in a technical and controversial sense. It has said, Lord, Lord, Experience, Experience; but in practice it has served ideas *forced into* experience, not *gathered from* it.

The confusion and artificiality thereby introduced into philosophical thought is nowhere more evident than in the empirical treatment of relations or dynamic continuities. The experience of a living being struggling to hold its own and make its way in an environment, physical and social, partly facilitating and partly obstructing its actions, is of necessity a matter of ties and connexions, of bearings and uses. The very point of experience, so to say, is that it doesn't occur in a vacuum; its agent-patient instead of being insulated and disconnected is bound up with the movement of things by most intimate and pervasive bonds. Only because the organism is in and of the world, and its activities correlated with those of other things in multiple ways, is it susceptible to undergoing things and capable of trying to reduce objects to means of securing its good fortune. That these connexions are of diverse kinds is irresistibly proved by the fluctuations which occur in its career. Help and hindrance, stimulation and inhibition, success

and failure mean specifically different modes of correlation. Although the actions of things in the world are taking place in one continuous stretch of existence, there are all kinds of specific affinities, repulsions, and relative indifferencies.

Dynamic connexions are qualitatively diverse, just as are the centers of action. *In this sense*, pluralism, not monism, is an established empirical fact. The attempt to establish monism from consideration of the very nature of a relation is a mere piece of dialectics. Equally dialectical is the effort to establish by a consideration of the nature of relations an ontological Pluralism of Ultimates: *simple and independent beings.* To attempt to get results from a consideration of the "external" nature of relations is of a piece with the attempt to deduce results from their "internal" character. Some things are relatively insulated from the influence of other things; some things are easily invaded by others; some things are fiercely attracted to conjoin their activities with those of others. Experience exhibits every kind of connexion[1] from the most intimate to mere external juxtaposition.

Empirically, then, active bonds or continuities of all kinds, together with static discontinuities, characterize existence. To deny this qualitative heterogeneity is to reduce the struggles and difficulties of life, its comedies and tragedies to illusion: to the non-being of the Greeks or to its modern counterpart, the "subjective." Experience is an affair of facilitations and checks, of being sustained and disrupted, being let alone, being helped and troubled, of good fortune and defeat in all the countless qualitative modes which these words pallidly suggest. The existence of genuine connexions of all manner of heterogeneity cannot be doubted. Such words as conjoining, disjoining, resisting, modifying, saltatory, and ambulatory (to use James' picturesque term) only hint at their actual heterogeneity.

Among the revisions and surrenders of historic problems demanded by this feature of empirical situations, those centering in the rationalistic-empirical controversy may be selected for attention. The implications of this controversy are twofold: First, that connexions are as homogeneous in fact as in name; and, secondly, if genuine, are all due to thought, or, if empirical, are arbitrary by-products of past particulars. The stubborn particularism of orthodox empiricism is its outstanding trait; consequently the opposed rationalism found no justification of bearings, continuities, and ties save to refer them in gross to the work of a hyper-empirical Reason.

Of course, not all empiricism prior to Hume and Kant was sensationalistic, pulverizing "experience" into isolated sensory qualities or simple ideas. It did not all follow Locke's lead in regarding the entire content of generalization as the "workmanship of the understanding." On the Continent, prior to Kant, philosophers were content to draw a line between empirical generalizations

[1]The word relation suffers from ambiguity. I am speaking here of *connexion*, dynamic and functional interaction. "Relation" is a term used also to express logical reference. I suspect that much of the controversy about internal and external relations is due to this ambiguity. One passes at will from existential connexions of things to logical relationship of terms. Such an identification of existences with *terms* is congenial to idealism, but is paradoxical in a professed realism.

regarding matters of fact and necessary universals applying to truths of reason. But logical atomism was implicit even in this theory. Statements referring to empirical fact were mere quantitative summaries of particular instances. In the sensationalism which sprang from Hume (and which was left unquestioned by Kant as far as any strictly empirical element was concerned) the implicit particularism was made explicit. But the doctrine that sensations and ideas are so many separate existences was not derived from observation nor from experiment. It was a logical deduction from a prior unexamined concept of the nature of experience. From the same concept it followed that the appearance of stable objects and of general principles of connexion was but an appearance.[2]

Kantianism, then, naturally invoked universal bonds to restore objectivity. But, in so doing, it accepted the particularism of experience and proceeded to supplement it from non-empirical sources. A sensory manifold being all which is really empirical in experience, a reason which transcends experience must provide synthesis. The net outcome might have suggested a correct account of experience. For we have only to forget the apparatus by which the net outcome is arrived at, to have before us the experience of the plain man—a diversity of ceaseless changes connected in all kinds of ways, static and dynamic. This conclusion would deal a deathblow to both empiricism and rationalism. For, making clear the non-empirical character of the alleged manifold of unconnected particulars, it would render unnecessary the appeal to functions of the understanding in order to connect them. With the downfall of the traditional notion of experience, the appeal to reason to supplement its defects becomes superfluous.

The tradition was, however, too strongly entrenched; especially as it furnished the subject-matter of an alleged science of states of mind which were directly known in their very presence. The historic outcome was a new crop of artificial puzzles about relations; it fastened upon philosophy for a long time the quarrel about the *a priori* and the *a posteriori* as its chief issue. The controversy is to-day quiescent. Yet it is not at all uncommon to find thinkers modern in tone and intent who regard any philosophy of experience as necessarily committed to denial of the existence of genuinely general propositions, and who take empiricism to be inherently averse to the recognition of the importance of an organizing and constructive intelligence.

The quiescence alluded to is in part due, I think, to sheer weariness. But it is also due to a change of standpoint introduced by biological conceptions; and particularly the discovery of biological continuity from the lower organisms to man. For a short period, Spencerians might connect the doctrine of evolution with the old problem, and use the long temporal accumulation of "experiences" to generate something which, for human experience, is *a priori*. But the tendency of the biological way of thinking is neither to confirm or negate the Spencerian doctrine, but to shift the issue. In the orthodox position *a posteriori* and *a priori* were affairs of knowledge. But it soon becomes obvious that while there

[2]There is some gain in substituting a doctrine of flux and interpenetration of psychical states, *à la* Bergson, for that of rigid discontinuity. But the substitution leaves untouched the fundamental misstatement of experience, the conception of experience as directly and primarily "inner" and psychical.

is assuredly something *a priori*—that is to say, native, unlearned, original—in human experience, that something is *not* knowledge, but is activities made possible by means of established connexions of neurones. This empirical fact does not solve the orthodox problem; it dissolves it. It shows that the problem was misconceived, and solution sought by both parties in the wrong direction.

Organic instincts and organic retention, or habit-forming, are undeniable factors in actual experience. They are factors which effect organization and secure continuity. They are among the specific facts which a description of experience cognizant of the correlation of organic action with the action of other natural objects will include. But while fortunately the contribution of biological science to a truly empirical description of experiencing has outlawed the discussion of the *a priori* and *a posteriori*, the transforming effect of the same contributions upon other issues has gone unnoticed, save as pragmatism has made an effort to bring them to recognition.

III

The point seriously at issue in the notion of experience common to both sides in the older controversy thus turns out to be the place of thought or intelligence in experience. Does reason have a distinctive office? Is there a characteristic order of relations contributed by it?

Experience, to return to our positive conception, is primarily what is undergone in connexion with activities whose import lies in their objective consequences—their bearing upon future experiences. Organic functions deal with things as things in course, in operation, in a state of affairs not yet given or completed. What is done with, what is just "there," is of concern only in the potentialities which it may indicate. As ended, as wholly given, it is of no account. But as a sign of what may come, it becomes an indispensable factor in behavior dealing with changes, the outcome of which is not yet determined.

The only power the organism possesses to control its own future depends upon the way its present responses modify changes which are taking place in its medium. A living being may be comparatively impotent, or comparatively free. It is all a matter of the way in which its present reactions to things influence the future reactions of things upon it. Without regard to its wish or intent every act it performs makes some difference in the environment. The change may be trivial as respects its own career and fortune. But it may also be of incalculable importance; it may import harm, destruction, or it may procure well-being.

Is it possible for a living being to increase its control of welfare and success? Can it manage, in any degree, to assure its future? Or does the amount of security depend wholly upon the accidents of the situation? Can it learn? Can it gain ability to assure its future in the present? These questions center attention upon the significance of reflective intelligence in the process of experience. The extent of an agent's capacity for inference, its power to use a given fact as a sign of something not yet given, measures the extent of its ability systematically to enlarge its control of the future.

A being which can use given and finished facts as signs of things to come; which can take given things as evidences of absent things, can, in that degree, forecast the future; it can form reasonable expectations. It is capable of achieving ideas; it is possessed of intelligence. For use of the given or finished to anticipate the consequence of processes going on is precisely what is meant by "ideas," by "intelligence."

As we have already noted, the environment is rarely all of a kind in its bearing upon organic welfare; its most whole-hearted support of life-activities is precarious and temporary. Some environmental changes are auspicious; others are menacing. The secret of success—that is, of the greatest attainable success—is for the organic response to cast in its lot with present auspicious changes to strengthen them and thus to avert the consequences flowing from occurrences of ill-omen. Any reaction is a venture; it involves risk. We always build better or worse than we can foretell. But the organism's fateful intervention in the course of events is blind, its choice is random, except as it can employ what happens to it as a basis of inferring what is likely to happen later. In the degree in which it can read future results in present on-goings, its responsive choice, its partiality to this condition or that, become intelligent. Its bias grows reasonable. It can deliberately, intentionally, participate in the direction of the course of affairs. Its foresight of different futures which result according as this or that present factor predominates in the shaping of affairs permits it to partake intelligently instead of blindly and fatally in the consequences its reactions give rise to. Participate it must, and to its own weal or woe. Inference, the use of what happens, to anticipate what will—or at least may—happen, makes the difference between directed and undirected participation. And this capacity for inferring is precisely the same as that use of natural occurrences for the discovery and determination of consequences—the formation of new dynamic connexions—which constitutes knowledge.

The fact that thought is an intrinsic feature of experience is fatal to the traditional empiricism which makes it an artificial by-product. But for that same reason it is fatal to the historic rationalisms whose justification was the secondary and retrospective position assigned to thought by empirical philosophy. According to the particularism of the latter, thought was inevitably only a bunching together of hard-and-fast separate items; thinking was but the gathering together and tying of items already completely given, or else an equally artificial untying—a mechanical adding and subtracting of the given. It was but a cumulative registration, a consolidated merger; generality was a matter of bulk, not of quality. Thinking was therefore treated as lacking constructive power; even its organizing capacity was but simulated, being in truth but arbitrary pigeon-holing. Genuine projection of the novel, deliberate variation and invention, are idle fictions in such a version of experience. If there ever was creation, it all took place at a remote period. Since then the world has only recited lessons.

The value of inventive construction is too precious to be disposed of in this cavalier way. Its unceremonious denial afforded an opportunity to assert that in addition to experience the subject has a ready-made faculty of thought or reason which transcends experience. Rationalism thus accepted the account

of experience given by traditional empiricism, and introduced reason as extra-empirical. There are still thinkers who regard any empiricism as necessarily committed to a belief in a cut-and-dried reliance upon disconnected precedents, and who hold that all systematic organization of past experiences for new and constructive purposes is alien to strict empiricism.

Rationalism never explained, however, how a reason extraneous to experience could enter into helpful relation with concrete experiences. By definition, reason and experience were antithetical, so that the concern of reason was not the fruitful expansion and guidance of the course of experience, but a realm of considerations too sublime to touch, or be touched by, experience. Discreet rationalists confined themselves to theology and allied branches of abtruse science, and to mathematics. Rationalism would have been a doctrine reserved for academic specialists and abstract formalists had it not assumed the task of providing an apologetics for traditional morals and theology, thereby getting into touch with actual human beliefs and concerns. It is notorious that historic empiricism was strong in criticism and in demolition of outworn beliefs, but weak for purposes of constructive social direction. But we frequently overlook the fact that whenever rationalism cut free from conservative apologetics, it was also simply an instrumentality for pointing out inconsistencies and absurdities in existing beliefs—a sphere in which it was immensely useful, as the Enlightenment shows. Leibniz and Voltaire were contemporary rationalists in more senses than one.[3]

The recognition that reflection is a genuine factor within experience and an indispensable factor in that control of the world which secures a prosperous and significant expansion of experience undermines historic rationalism as assuredly as it abolishes the foundations of historic empiricism. The bearing of a correct idea of the place and office of reflection upon modern idealisms is less obvious, but no less certain.

One of the curiosities of orthodox empiricism is that its outstanding speculative problem is the existence of an "external world." For in accordance with the notion that experience is attached to a private subject as its exclusive possession, a world like the one in which we appear to live must be "external" to experience instead of being its subject-matter. I call it a curiosity, for if anything seems adequately grounded empirically it is the existence of a world which resists the characteristic functions of the subject of experience; which goes its way, in some respects, independently of these functions, and which frustrates our hopes and intentions. Ignorance which is fatal; disappointment; the need of adjusting means and ends to the course of nature, would seem to be facts sufficiently characterizing empirical situations as to render the existence of an external world indubitable.

That the description of experience was arrived at by forcing actual empirical facts into conformity with dialectic developments from a concept of a knower outside of the real world of nature is testified to by the historic alliance of

[3]Mathematical science in its formal aspects, or as a branch of formal logic, has been the empirical stronghold of rationalism. But an empirical empiricism, in contrast with orthodox deductive empiricism, has no difficulty in establishing its jurisdiction as to deductive functions.

empiricism and idealism.[4] According to the most logically consistent editions of orthodox empiricism, all that can be experienced is the fleeting, the momentary, mental state. That alone is absolutely and indubitably present; therefore, it alone is cognitively certain. It alone is *knowledge*. The existence of the past (and of the future), of a decently stable world and of other selves—indeed, of one's own self—falls outside this datum of experience. These can be arrived at only by inference which is "ejective"—a name given to an alleged type of inference that jumps from experience, as from a springboard, to something beyond experience.

I should not anticipate difficulty in showing that this doctrine is, dialectically, a mass of inconsistencies. Avowedly it is a doctrine of desperation, and as such it is cited here to show the desperate straits to which ignoring empirical facts has reduced a doctrine of experience. More positively instructive are the objective idealisms which have been the offspring of the marriage between the "reason" of historic rationalism and the alleged immediate psychical stuff of historic empiricism. These idealisms have recognized the genuineness of connexions and the impotency of "feeling." They have then identified connexions with logical or rational connexions, and thus treated "the real World" as a synthesis of sentient consciousness by means of a rational self-consciousness introducing objectivity: stability and universality of reference.

Here again, for present purposes, criticism is unnecessary. It suffices to point out that the value of this theory is bound up with the genuineness of the problem of which it purports to be a solution. If the basic concept is a fiction, there is no call for the solution. The more important point is to perceive how far the "thought" which figures in objective idealism comes from meeting the empirical demands made upon actual thought. Idealism is much less formal than historic rationalism. It treats thought, or reason, as constitutive of experience by means of uniting and constructive functions, not as just concerned with a realm of eternal truths apart from experience. On such a view thought certainly loses its abstractness and remoteness. But, unfortunately, in thus gaining the whole world it loses its own self. A world already, in its intrinsic structure, dominated by thought is not a world in which, save by contradiction of premises, thinking has anything to do.

That the doctrine logically results in making change unreal and error unaccountable are consequences of importance in the technique of professional philosophy; in the denial of empirical fact which they imply they seem to many a *reductio ad absurdum* of the premises from which they proceed. But, after all, such consequences are of only professional import. What is serious, even sinister, is the implied sophistication regarding the place and office of reflection in the scheme of things. A doctrine which exalts thought in name while ignoring its efficacy in fact (that is, its use in bettering life) is a doctrine which cannot be entertained and taught without serious peril. Those who are not concerned with professional philosophy but who are solicitous for intelligence as a factor

[4]It is a shame to devote the word idealism, with its latent moral, practical connotations, to a doctrine whose tenets are the denial of the existence of a physical world, and the psychical character of all objects–at least as far as they are knowable. But I am following usage, not attempting to make it.

in the amelioration of actual conditions can but look askance at any doctrine which holds that the entire scheme of things is already, if we but acquire the knack of looking at it aright, fixedly and completely rational. It is a striking manifestation of the extent in which philosophies have been compensatory in quality.[5] But the matter cannot be passed over as if it were simply a question of not grudging a certain amount of consolation to one amid the irretrievable evils of life. For as to these evils no one knows how many are retrievable; and a philosophy which proclaims the ability of a dialectic theory of knowledge to reveal the world as already and eternally a self-luminous rational whole, contaminates the scope and use of thought at its very spring. To substitute the otiose insight gained by manipulation of a formula for the slow coöperative work of a humanity guided by reflective intelligence is more than a technical blunder of speculative philosophers.

A practical crisis may throw the relationship of ideas to life into an exaggerated Brocken-like spectral relief, where exaggeration renders perceptible features not ordinarily noted. The use of force to secure narrow because exclusive aims is no novelty in human affairs. The deploying of all the intelligence at command in order to increase the effectiveness of the force used is not so common, yet presents nothing intrinsically remarkable. The identification of force—military, economic, and administrative—with moral necessity and moral culture is, however, a phenomenon not likely to exhibit itself on a wide scale except where intelligence has already been suborned by an idealism which identifies "the actual with the rational," and thus finds the measure of reason in the brute event determined by superior force. If we are to have a philosophy which will intervene between attachment to rule of thumb muddling and devotion to a systematized subordination of intelligence to preëxistent ends, it can be found only in a philosophy which finds the ultimate measure of intelligence in consideration of a desirable future and in search for the means of bringing it progressively into existence. When professed idealism turns out to be a narrow pragmatism—narrow because taking for granted the finality of ends determined by historic conditions—the time has arrived for a pragmatism which shall be empirically idealistic, proclaiming the essential connexion of intelligence with the unachieved future—with possibilities involving a transfiguration.

IV

Why has the description of experience been so remote from the facts of empirical situations? To answer this question throws light upon the submergence of recent philosophizing in epistemology—that is, in discussions of the nature, possibility, and limits of knowledge in general, and in the attempt to reach conclusions regarding the ultimate nature of reality from the answers given to such questions.

The reply to the query regarding the currency of a non-empirical doctrine of experience (even among professed empiricists) is that the traditional account is derived from a conception once universally entertained regarding the subject or

[5] See Dr. Kallen's essay, below.

bearer or center of experience. The description of experience has been forced into conformity with this prior conception; it has been primarily a deduction from it, actual empirical facts being poured into the moulds of the deductions. The characteristic feature of this prior notion is the assumption that experience centers in, or gathers about, or proceeds from a center or subject which is outside the course of natural existence, and set over against it:—it being of no importance, for present purposes, whether this antithetical subject is termed soul, or spirit, or mind, or ego, or consciousness, or just knower or knowing subject.

There are plausible grounds for thinking that the currency of the idea in question lies in the form which men's religious preoccupations took for many centuries. These were deliberately and systematically other-worldly. They centered about a Fall which was not an event in nature, but an aboriginal catastrophe that corrupted Nature; about a redemption made possible by supernatural means; about a life in another world—essentially, not merely spatially, Other. The supreme drama of destiny took place in a soul or spirit which, under the circumstances, could not be conceived other than as non-natural—extra-natural, if not, strictly speaking, supernatural. When Descartes and others broke away from medieval interests, they retained as commonplaces its intellectual apparatus: Such as, knowledge is exercised by a power that is extra-natural and set over against the world to be known. Even if they had wished to make a complete break, they had nothing to put as knower in the place of the soul. It may be doubted whether there was any available empirical substitute until science worked out the fact that physical changes are functional correlations of energies, and that man is continuous with other forms of life, and until social life had developed an intellectually free and responsible individual as its agent.

But my main point is not dependent upon any particular theory as to the historic origin of the notion about the bearer of experience. The point is there on its own account. The essential thing is that the bearer was conceived as outside of the world; so that experience consisted in the bearer's being affected through a type of operations not found anywhere in the world, while knowledge consists in surveying the world, looking at it, getting the view of a spectator.

The theological problem of attaining knowledge of God as ultimate reality was transformed in effect into the philosophical problem of the possibility of attaining knowledge of reality. For how is one to get beyond the limits of the subject and subjective occurrences? Familiarity breeds credulity oftener than contempt. How can a problem be artificial when men have been busy discussing it almost for three hundred years? But if the assumption that experience is something set over against the world is contrary to fact, then the problem of how self or mind or subjective experience or consciousness can reach knowledge of an external world is assuredly a meaningless problem. Whatever questions there may be about knowledge, they will not be the kind of problems which have formed epistemology.

The problem of knowledge as conceived in the industry of epistemology is the problem of knowledge *in general*—of the possibility, extent, and validity of knowledge in general. What does this "in general" mean? In ordinary life there

are problems a-plenty of knowledge in particular; every conclusion we try to reach, theoretical or practical, affords such a problem. But there is no problem of knowledge in general. I do not mean, of course, that general statements cannot be made about knowledge, or that the problem of attaining these general statements is not a genuine one. On the contrary, specific instances of success and failure in inquiry exist, and are of such a character that one can discover the conditions conducing to success and failure. Statement of these conditions constitutes logic, and is capable of being an important aid in proper guidance of further attempts at knowing. But this logical problem of knowledge is at the opposite pole from the epistemological. Specific problems are about right conclusions to be reached—which means, in effect, right ways of going about the business of inquiry. They imply a difference between knowledge and error consequent upon right and wrong methods of inquiry and testing; not a difference between experience and the world. The problem of knowledge *überhaupt* exists because it is assumed that there is a knower in general, who is outside of the world to be known, and who is defined in terms antithetical to the traits of the world. With analogous assumptions, we could invent and discuss a problem of digestion in general. All that would be required would be to conceive the stomach and food-material as inhabiting different worlds. Such an assumption would leave on our hands the question of the possibility, extent, nature, and genuineness of any transaction between stomach and food.

But because the stomach and food inhabit a continuous stretch of existence, because digestion is but a correlation of diverse activities in one world, the problems of digestion are specific and plural: What are the particular correlations which constitute it? How does it proceed in different situations? What is favorable and what unfavorable to its best performance?—and so on. Can one deny that if we were to take our clue from the present empirical situation, including the scientific notion of evolution (biological continuity) and the existing arts of control of nature, subject and object would be treated as occupying the same natural world as unhesitatingly as we assume the natural conjunction of an animal and its food? Would it not follow that knowledge is one way in which natural energies coöperate? Would there be any problem save discovery of the peculiar structure of this coöperation, the conditions under which it occurs to best effect, and the consequences which issue from its occurrence?

It is a commonplace that the chief divisions of modern philosophy, idealism in its different kinds, realisms of various brands, so-called common-sense dualism, agnosticism, relativism, phenomenalism, have grown up around the epistemological problem of the general relation of subject and object. Problems not openly epistemological, such as whether the relation of changes in consciousness to physical changes is one of interaction, parallelism, or automatism have the same origin. What becomes of philosophy, consisting largely as it does of different answers to these questions, in case the assumptions which generate the questions have no empirical standing? Is it not time that philosophers turned from the attempt to determine the comparative merits of various replies to the questions to a consideration of the claims of the questions?

When dominating religious ideas were built up about the idea that the self

is a stranger and pilgrim in this world; when morals, falling in line, found true good only in inner states of a self inaccessible to anything but its own private introspection; when political theory assumed the finality of disconnected and mutually exclusive personalities, the notion that the bearer of experience is antithetical to the world instead of being in and of it was congenial. It at least had the warrant of other beliefs and aspirations. But the doctrine of biological continuity or organic evolution has destroyed the scientific basis of the conception. Morally, men are now concerned with the amelioration of the conditions of the common lot in this world. Social sciences recognize that associated life is not a matter of physical juxtaposition, but of genuine intercourse—of community of experience in a non-metaphorical sense of community. Why should we longer try to patch up and refine and stretch the old solutions till they seem to cover the change of thought and practice? Why not recognize that the trouble is with the problem?

A belief in organic evolution which does not extend unreservedly to the way in which the subject of experience is thought of, and which does not strive to bring the entire theory of experience and knowing into line with biological and social facts, is hardly more than Pickwickian. There are many, for example, who hold that dreams, hallucinations, and errors cannot be accounted for at all except on the theory that a self (or "consciousness") exercises a modifying influence upon the "real object." The logical assumption is that consciousness is outside of the real object; that it is something different in kind, and therefore has the power of changing "reality" into appearance, of introducing "relativities" into things as they are in themselves—in short, of infecting real things with subjectivity. Such writers seem unaware of the fact that this assumption makes consciousness supernatural in the literal sense of the word; and that, to say the least, the conception can be accepted by one who accepts the doctrine of biological continuity only after every other way of dealing with the facts has been exhausted.

Realists, of course (at least some of the Neo-realists), deny any such miraculous intervention of consciousness. But they[6] admit the reality of the problem; denying only this particular solution, they try to find some other way out, which will still preserve intact the notion of knowledge as a relationship of a general sort between subject and object.

Now dreams and hallucinations, errors, pleasures, and pains, possibly "secondary" qualities, do not occur save where there are organic centers of experience. They cluster about a subject. But to treat them as things which inhere exclusively in the subject; or as posing the problem of a distortion of *the* real object by a knower set over against the world, or as presenting facts to be explained primarily as cases of contemplative knowledge, is to testify that one has still to learn the lesson of evolution in its application to the affairs in hand.

If biological development be accepted, the subject of experience is at least an animal, continuous with other organic forms in a process of more complex

[6]The "they" means the "some" of the prior sentence–those whose realism is epistemological, instead of being a plea for taking the facts of experience as we find them without refraction through epistemological apparatus.

organization. An animal in turn is at least continuous with chemico-physical processes which, in living things, are so organized as really to constitute the activities of life with all their defining traits. And experience is not identical with brain action; it is the entire organic agent-patient in all its interaction with the environment, natural and social. The brain is primarily an organ of a certain kind of behavior, not of knowing the world. And to repeat what has already been said, experiencing is just certain modes of interaction, of correlation, of natural objects among which the organism happens, so to say, to be one. It follows with equal force that experience means primarily not knowledge, but ways of doing and suffering. Knowing must be described by discovering what particular mode—qualitatively unique—of doing and suffering it is. As it is, we find experience assimilated to a non-empirical concept of knowledge, derived from an antecedent notion of a spectator outside of the world.[7]

In short, the epistemological fashion of conceiving dreams, errors, "relativities," etc., depends upon the isolation of mind from intimate participation with other changes in the same continuous nexus. Thus it is like contending that when a bottle bursts, the bottle is, in some self-contained miraculous way, exclusively responsible. Since it is the nature of a bottle to be whole so as to retain fluids, bursting is an abnormal event—comparable to an hallucination. Hence it cannot belong to the "real" bottle; the "subjectivity" of glass is the cause. It is obvious that since the breaking of glass is a case of specific correlation of natural energies, its accidental and abnormal character has to do with *consequences*, not with causation. Accident is interference with the consequences for which the bottle is intended. The bursting considered apart from its bearing on these consequences is on a plane with any other occurrence in the wide world. But from the standpoint of a desired future, bursting is an anomaly, an interruption of the course of events.

The analogy with the occurrence of dreams, hallucinations, etc., seems to me exact. Dreams are not something outside of the regular course of events; they are in and of it. They are not cognitive distortions of real things; they are *more* real things. There is nothing abnormal in their existence, any more than there is in the bursting of a bottle.[8] But they may be abnormal, from the standpoint of their influence, of their operation as stimuli in calling out responses to modify the future. Dreams have often been taken as prognostics of what is to happen; they have modified conduct. A hallucination may lead a man to consult a doctor; such a consequence is right and proper. But the consultation indicates that

[7]It is interesting to note that some of the realists who have assimilated the cognitive relation to other existential relations in the world (instead of treating it as an unique or epistemological relation) have been forced in support of their conception of knowledge as a "presentative" or spectatorial affair to extend the defining features of the latter to all relations among things, and hence to make all the "real" things in the world pure "simples," wholly independent of one another. So conceived the doctrine of external relations appears to be rather the doctrine of complete externality of *things*. Aside from this point, the doctrine is interesting for its dialectical ingenuity and for the elegant development of assumed premises, rather than convincing on account of empirical evidence supporting it.

[8]In other words, there is a general "problem of error" only because there is a general problem of evil, concerning which see Dr. Kallen's essay, below.

the subject regarded it as an indication of consequences which he feared: as a symptom of a disturbed life. Or the hallucination may lead him to anticipate consequences which in fact flow only from the possession of great wealth. Then the hallucination is a disturbance of the normal course of events; the occurrence is wrongly *used* with reference to eventualities.

To regard reference to use and to desired and intended consequences as involving a "subjective" factor is to miss the point, for this has regard to the future. The uses to which a bottle are put are not mental; they do not consist of physical states; they are further correlations of natural existences. Consequences in use are genuine natural events; but they do not occur without the intervention of behavior involving anticipation of a future. The case is not otherwise with an hallucination. The differences it makes are in any case differences in the course of the one continuous world. The important point is whether they are good or bad differences. To use the hallucination as a sign of organic lesions that menace health means the beneficial result of seeing a physician; to respond to it as a sign of consequences such as actually follow only from being persecuted is to fall into error—to be abnormal. The persecutors are "unreal"; that is, there are no things which act as persecutors act; but the hallucination exists. Given its conditions it is as natural as any other event, and poses only the same kind of problem as is put by the occurrence of, say, a thunderstorm. The "unreality" of persecution is not, however, a subjective matter; it means that conditions do not exist for producing the *future* consequences which are now anticipated and reacted to. Ability to anticipate future consequences and to respond to them as stimuli to present behavior may well *define* what is meant by a mind or by "consciousness."[9] But this is only a way of saying just what kind of a real or natural existence the subject is; it is not to fall back on a preconception about an unnatural subject in order to characterize the occurrence of error.

Although the discussion may be already labored, let us take another example—the occurrence of disease. By definition it is pathological, abnormal. At one time in human history this abnormality was taken to be something dwelling in the intrinsic nature of the event—in its existence irrespective of future consequences. Disease was literally extra-natural and to be referred to demons, or to magic. No one to-day questions its naturalness—its place in the order of natural events. Yet it is abnormal—for it operates to effect results different from those which follow from health. The difference is a genuine empirical difference, not a mere mental distinction. From the standpoint of bearing on a subsequent course of events disease is unnatural, in spite of the naturalness of its occurrence and origin.

The habit of ignoring reference to the future is responsible for the assumption that to admit human participation in any form is to admit the "subjective" in a sense which alters the objective into the phenomenal. There have been those who, like Spinoza, regarded health and disease, good and ill, as equally real and equally unreal. However, only a few consistent materialists have included truth along with error as merely phenomenal and subjective. But if one does

[9]Compare the paper by Professor Bode.

not regard movement toward possible consequences as genuine, wholesale denial of existential validity to all these distinctions is the only logical course. To select truth as objective and error as "subjective" is, on this basis, an unjustifiably partial procedure. Take everything as fixedly given, and both truth and error are arbitrary insertions into fact. Admit the genuineness of changes going on, and capacity for its direction through organic action based on foresight, and both truth and falsity are alike existential. It is human to regard the course of events which is in line with our own efforts as the *regular* course of events, and interruptions as abnormal, but this partiality of human desire is itself a part of what actually takes place.

It is now proposed to take a particular case of the alleged epistemological predicament for discussion, since the entire ground cannot be covered. I think, however, the instance chosen is typical, so that the conclusion reached may be generalized.

The instance is that of so-called relativity in perception. There are almost endless instances; the stick bent in water; the whistle changing pitch with change of distance from the ear; objects doubled when the eye is pushed; the destroyed star still visible, etc., etc. For our consideration we may take the case of a spherical object that presents itself to one observer as a flat circle, to another as a somewhat distorted elliptical surface. This situation gives empirical proof, so it is argued, of the difference between a real object and mere appearance. Since there is but one object, the existence of two *subjects* is the sole differentiating factor. Hence the two appearances of the one real object is proof of the intervening distorting action of the subject. And many of the Neo-realists who deny the difference in question, admit the case to be one of knowledge and accordingly to constitute an epistemological problem. They have in consequence developed wonderfully elaborate schemes of sundry kinds to maintain "epistemological monism" intact.

Let us try to keep close to empirical facts. In the first place the two unlike appearances of the one sphere are physically necessary because of the laws of reaction of light. If the one sphere did *not* assume these two appearances under given conditions, we should be confronted with a hopelessly irreconcilable discrepancy in the behavior of natural energy. That the result is natural is evidenced by the fact that two cameras—or other arrangements of apparatus for reflecting light—yield precisely the same results. Photographs are as genuinely physical existences as the original sphere; and they exhibit the two geometrical forms.

The statement of these facts makes no impression upon the confirmed epistemologist; he merely retorts that as long as it is admitted that the organism is the cause of a sphere being seen, from different points, as a circular and as an elliptical surface, the essence of his contention—the modification of the real object by the subject—is admitted. To the question why the same logic does not apply to photographic records he makes, as far as I know, no reply at all.

The source of the difficulty is not hard to see. The objection assumes that the alleged modifications of *the* real object are cases of *knowing* and hence attributable to the influence of a *knower*. Statements which set forth the doctrine

will always be found to refer to the organic factor, to the eye, as an observer or a percipient. Even when reference is made to a lens or a mirror, language is sometimes used which suggests that the writer's naïveté is sufficiently gross to treat these physical factors as if they were engaged in perceiving the sphere. But as it is evident that the lens operates as a physical factor in correlation with other physical factors—notably light—so it ought to be evident that the intervention of the optical apparatus of the eye is a purely non-cognitive matter. The relation in question is not one between a sphere and a would-be knower of it, unfortunately condemned by the nature of the knowing apparatus to alter the thing he would know; it is an affair of the dynamic interaction of two physical agents in producing a third thing, an effect;—an affair of precisely the same kind as in any physical conjoint action, say the operation of hydrogen and oxygen in producing water. To regard the eye as primarily a knower, an observer, of things, is as crass as to assign that function to a camera. But unless the eye (or optical apparatus, or brain, or organism) be so regarded, there is absolutely no problem of observation or of knowledge in the case of the occurrence of elliptical and circular surfaces. Knowledge does not enter into the affair at all till *after* these forms of refracted light have been produced. About them there is nothing unreal. Light is really, physically, existentially, refracted into these forms. If the same spherical form upon refracting light to physical objects in two quite different positions produced the same geometric forms, there would, indeed, be something to marvel at—as there would be if wax produced the same results in contact simultaneously with a cold body and with a warm one. Why talk about *the real* object in relation to *a knower* when what is given is one real thing in dynamic connection with another real thing?

The way of dealing with the case will probably meet with a retort; at least, it has done so before. It has been said that the account given above and the account of traditional subjectivism differ only verbally. The essential thing in both, so it is said, is the admission that an activity of a self or subject or organism makes a difference in the real object. Whether the subject makes this difference in the very process of knowing or makes it prior to the act of knowing is a minor matter; what is important is that the known thing has, by the time it is known, been "subjectified."

The objection gives a convenient occasion for summarizing the main points of the argument. On the one hand, the retort of the objector depends upon talking about *the* real object. Employ the term "*a* real object," and the change produced by the activity characteristic of the optical apparatus is of just the same kind as that of the camera lens or that of any other physical agency. Every event in the world marks a difference made to one existence in active conjunction with some other existence. And, as for the alleged subjectivity, if subjective is used merely as an adjective to designate the specific activity of a particular existence, comparable, say, to the term feral, applied to tiger, or metallic, applied to iron, then of course reference to subjective is legitimate. But it is also tautological. It is like saying that flesh eaters are carnivorous. But the term "subjective" is so consecrated to other uses, usually implying invidious contrast with objectivity (while subjective in the sense just suggested means

specific mode *of* objectivity), that it is difficult to maintain this innocent sense. Its use in any disparaging way in the situation before us—any sense implicating contrast with a real object—assumes that the organism *ought* not to make any difference when it operates in conjunction with other things. Thus we run to earth that assumption that the subject is heterogeneous from every other natural existence; it is to be the one otiose, inoperative thing in a moving world—our old assumption of the self as outside of things.[10]

What and where is knowledge in the case we have been considering? Not, as we have already seen, in the production of forms of light having a circular and elliptical surface. These forms are natural happenings. They may enter into knowledge or they may not, according to circumstances. Countless such refractive changes take place without being noted.[11] When they become subject-matter for knowledge, the inquiry they set on foot may take on an indefinite variety of forms. One may be interested in ascertaining more about the structural peculiarities of the forms themselves; one may be interested in the mechanism of their production; one may find problems in projective geometry, or in drawing and painting—all depending upon the specific matter-of-fact context. The forms may be *objectives* of knowledge—of reflective examination—or they may be means of knowing something else. It may happen—under some circumstances it does happen—that the objective of inquiry is the nature of the geometric form which, when refracting light, gives rise to these other forms. In this case the sphere is the thing known, and in this case, the forms of light are signs or evidence of the conclusion to be drawn. There is no more reason for supposing that they *are* (mis)knowledges of the sphere—that the sphere is necessarily and from the start what one is trying to know—than for supposing that the position of the mercury in the thermometer tube is a cognitive distortion of atmospheric pressure. In each case (that of the mercury and that of, say, a circular surface) the primary datum is a physical happening. In each case it may be used, upon occasion, as a sign or evidence of the nature of the causes which brought it about. Given the position in question, the circular form would be an intrinsically *unreliable* evidence of the nature and position of the spherical body only in case it, as the direct datum of perception, were *not* what it is—a circular form.

I confess that all this seems so obvious that the reader is entitled to inquire into the motive for reciting such plain facts. Were it not for the persistence of the epistemological problem it would be an affront to the reader's intelligence to dwell upon them. But as long as such facts as we have been discussing furnish the subject-matter with which philosophizing is peculiarly concerned, these

[10] As the attempt to retain the epistemological problem and yet to reject idealistic and relativistic solutions has forced some Neo-realists into the doctrine of isolated and independent simples, so it has also led to a doctrine of Eleatic pluralism. In order to maintain the doctrine the subject makes no difference to anything else, it is held that *no* ultimate real makes any difference to anything else–all this rather than surrender once for all the genuineness of the problem and to follow the lead of empirical subject-matter.

[11] There is almost no end to the various dialectic developments of the epistemological situation. When it is held that all the relations of the type in question are cognitive, and yet it is recognized (as it must be) that many such "transformations" go unremarked, the theory is supplemented by introducing "unconscious" psychical modifications.

commonplaces must be urged and reiterated. They bear out two contentions which are important at the juncture, although they will lose special significance as soon as these are habitually recognized: Negatively, a prior and non-empirical notion of the self is the source of the prevailing belief that experience as such is primarily cognitional—a knowledge affair; positively, *knowledge is always a matter of the use that is made of experienced natural events*, a use in which given things are treated as indications of what will be experienced under different conditions.

Let us make one effort more to clear up these points. Suppose it is a question of knowledge of water. The thing to be known does not present itself primarily as a matter of knowledge-and-ignorance at all. It occurs as a stimulus to action and as the source of certain undergoings. It is something to react to:—to drink, to wash with, to put out fire with, and also something that reacts unexpectedly to our reactions, that makes us undergo disease, suffocation, drowning. In this twofold way, water or anything else enters into experience. Such presence in experience has of itself nothing to do with knowledge or consciousness; nothing that is in the sense of depending upon them, though it has everything to do with knowledge and consciousness in the sense that the latter depends upon prior experience of this non-cognitive sort. Man's experience is what it is because his response to things (even successful response) and the reactions of things to his life, are so radically different from knowledge. The difficulties and tragedies of life, the stimuli to acquiring knowledge, lie in the radical disparity of presence-in-experience and presence-in-knowing. Yet the immense importance of knowledge experience, the fact that turning presence-in-experience over into presence-in-a-knowledge-experience is the sole mode of control of nature, has systematically hypnotized European philosophy since the time of Socrates into thinking that all experiencing is a mode of knowing, if not good knowledge, then a low-grade or confused or implicit knowledge.

When water is an adequate stimulus to action or when its reactions oppress and overwhelm us, it remains outside the scope of knowledge. When, however, the bare presence of the thing (say, as optical stimulus) ceases to operate directly as stimulus to response and begins to operate in connection with a forecast of the consequences it will effect when responded to, it begins to acquire meaning—to be known, to be an object. It is noted as something which is wet, fluid, satisfies thirst, allays uneasiness, etc. The conception that we begin with a known visual quality which is thereafter enlarged by adding on qualities apprehended by the other senses does not rest upon experience; it rests upon making experience conform to the notion that every experience *must* be a cognitive noting. As long as the visual stimulus operates as a stimulus on its own account, there is no apprehension, no noting, of color or light at all. To much the greater portion of sensory stimuli we react in precisely this wholly non-cognitive way. In the attitude of suspended response in which consequences are anticipated, the direct stimulus becomes a sign or index of something else—and thus matter of noting or apprehension or acquaintance, or whatever term may be employed. This difference (together, of course, with the consequences which go with it) is the difference which the natural event of knowing makes to the natural event of direct

organic stimulation. It is no change of a reality into an unreality, of an object into something subjective; it is no secret, illicit, or epistemological transformation; it is a genuine acquisition of new and distinctive features through entering into relations with things with which it was not formerly connected—namely, possible and future things.

But, replies some one so obsessed with the epistemological point of view that he assumes that the prior account is a rival epistemology in disguise, all this involves no change in Reality, no difference made to Reality. Water was all the time all the things it is ever found out to be. Its real nature has not been altered by knowing it; any such alteration means a mis-knowing.

In reply let it be said,—once more and finally,—there is no assertion or implication about *the* real object or *the* real world or *the* reality. Such an assumption goes with that epistemological universe of discourse which has to be abandoned in an empirical universe of discourse. The change is of *a* real object. An incident of the world operating as a physiologically direct stimulus is assuredly a reality. Responded to, it produces specific consequences in virtue of the response. Water is not drunk unless somebody drinks it; it does not quench thirst unless a thirsty person drinks it—and so on. Consequences occur whether one is aware of them or not; they are integral facts in experience. But let one of these consequences be anticipated and let it, as anticipated, become an indispensable element in the stimulus, and then there is a known object. It is not that knowing *produces* a change, but that it *is* a change of the specific kind described. A serial process, the successive portions of which are as such incapable of simultaneous occurrence, is telescoped and condensed into an object, a unified inter-reference of contemporaneous properties, most of which express potentialities rather than completed data.

Because of this change, an *object* possesses truth or error (which the physical occurrence as such never has); it is classifiable as fact or fantasy; it is of a sort or kind, expresses an essence or nature, possesses implications, etc., etc. That is to say, it is marked by specifiable *logical* traits not found in physical occurrences as such. Because objective idealisms have seized upon these traits as constituting the very essence of Reality is no reason for proclaiming that they are ready-made features of physical happenings, and hence for maintaining that knowing is nothing but an appearance of things on a stage for which "consciousness" supplies the footlights. For only the epistemological predicament leads to "presentations" being regarded as cognitions of things which were previously unpresented. In any empirical situation of everyday life or of science, knowledge signifies something stated or inferred of another thing. Visible water is not a more less erroneous presentation of H_{2}O, but H_{2}O is a knowledge about the thing we see, drink, wash with, sail on, and use for power.

A further point and the present phase of discussion terminates. Treating knowledge as a presentative relation between the knower and object makes it necessary to regard the mechanism of *presentation* as constituting the act of knowing. Since things may be presented in sense-perception, in recollection, in imagination and in conception, and since the mechanism in every one of these four styles of presentation is sensory-cerebral the problem of knowing becomes

a mind-body problem.[12] The psychological, or physiological, mechanism of presentation involved in seeing a chair, remembering what I ate yesterday for luncheon, imagining the moon the size of a cart wheel, conceiving a mathematical continuum is identified with the operation of knowing. The evil consequences are twofold. The problem of the relation of mind and body has become a part of the problem of the possibility of knowledge in general, to the further complication of a matter already hopelessly constrained. Meantime the actual process of knowing, namely, operations of controlled observation, inference, reasoning, and testing, the only process with *intellectual* import, is dismissed as irrelevant to the theory of knowing. The methods of knowing practised in daily life and science are excluded from consideration in the philosophical theory of knowing. Hence the constructions of the latter become more and more elaborately artificial because there is no definite check upon them. It would be easy to quote from epistemological writers statements to the effect that these processes (which supply the only empirically verifiable facts of knowing) are *merely* inductive in character, or even that they are of purely psychological significance. It would be difficult to find a more complete inversion of the facts than in the latter statement, since presentation constitutes in fact the psychological affair. A confusion of logic with physiological physiology has bred hybrid epistemology, with the amazing result that the technique of effective inquiry is rendered irrelevant to the theory of knowing, and those physical events involved in the occurrence of data for knowing are treated as if they constituted the act of knowing.

V

What are the bearings of our discussion upon the conception of the present scope and office of philosophy? What do our conclusions indicate and demand with reference to philosophy itself? For the philosophy which reaches such conclusions regarding knowledge and mind must apply them, sincerely and whole-heartedly, to its idea of its own nature. For philosophy claims to be one form or mode of knowing. If, then, the conclusion is reached that knowing is a way of employing empirical occurrences with respect to increasing power to direct the consequences which flow from things, the application of the conclusion must be made to philosophy itself. It, too, becomes not a contemplative survey of existence nor an analysis of what is past and done with, but an outlook upon future possibilities with reference to attaining the better and averting the worse. Philosophy must take, with good grace, its own medicine.

It is easier to state the negative results of the changed idea of philosophy than the positive ones. The point that occurs to mind most readily is that philosophy will have to surrender all pretension to be peculiarly concerned with ultimate reality, or with reality as a complete (i.e., completed) whole: with

[12] Conception-presentation has, of course, been made by many in the history of speculation an exception to this statement; "pure" memory is also made an exception by Bergson. To take cognizance of this matter would, of course, accentuate, not relieve, the difficulty remarked upon in the text.

the real object. The surrender is not easy of achievement. The philosophic tradition that comes to us from classic Greek thought and that was reinforced by Christian philosophy in the Middle Ages discriminates philosophical knowing from other modes of knowing by means of an alleged peculiarly intimate concern with supreme, ultimate, true reality. To deny this trait to philosophy seems to many to be the suicide of philosophy; to be a systematic adoption of skepticism or agnostic positivism.

The pervasiveness of the tradition is shown in the fact that so vitally a contemporary thinker as Bergson, who finds a philosophic revolution involved in abandonment of the traditional identification of the truly real with the fixed (an identification inherited from Greek thought), does not find it in his heart to abandon the counterpart identification of philosophy with search for the truly Real; and hence finds it necessary to substitute an ultimate and absolute flux for an ultimate and absolute permanence. Thus his great empirical services in calling attention to the fundamental importance of considerations of time for problems of life and mind get compromised with a mystic, non-empirical "Intuition"; and we find him preoccupied with solving, by means of his new idea of ultimate reality, the traditional problems of realities-in-themselves and phenomena, matter and mind, free-will and determinism, God and the world. Is not that another evidence of the influence of the classic idea about philosophy?

Even the new realists are not content to take their realism as a plea for approaching subject-matter directly instead of through the intervention of epistemological apparatus; they find it necessary first to determine the status of *the* real object. Thus they too become entangled in the problem of the possibility of error, dreams, hallucinations, etc., in short, the problem of evil. For I take it that an uncorrupted realism would accept such things as real events, and find in them no other problems than those attending the consideration of any real occurrence—namely, problems of structure, origin, and operation.

It is often said that pragmatism, unless it is content to be a contribution to mere methodology, must develop a theory of Reality. But the chief characteristic trait of the pragmatic notion of reality is precisely that no theory of Reality in general, *überhaupt*, is possible or needed. It occupies the position of an emancipated empiricism or a thoroughgoing naïve realism. It finds that "reality" is a *denotative* term, a word used to designate indifferently everything that happens. Lies, dreams, insanities, deceptions, myths, theories are all of them just the events which they specifically are. Pragmatism is content to take its stand with science; for science finds all such events to be subject-matter of description and inquiry—just like stars and fossils, mosquitoes and malaria, circulation and vision. It also takes its stand with daily life, which finds that such things really have to be reckoned with as they occur interwoven in the texture of events.

The only way in which the term reality can ever become more than a blanket denotative term is through recourse to specific events in all their diversity and thatness. Speaking summarily, I find that the retention by philosophy of the notion of a Reality feudally superior to the events of everyday occurrence is the chief source of the increasing isolation of philosophy from common sense and science. For the latter do not operate in any such region. As with them of old,

philosophy in dealing with real difficulties finds itself still hampered by reference to realities more real, more ultimate, than those which directly happen.

I have said that identifying the cause of philosophy with the notion of superior reality is the cause of an *increasing* isolation from science and practical life. The phrase reminds us that there was a time when the enterprise of science and the moral interests of men both moved in a universe invidiously distinguished from that of ordinary occurrence. While all that happens is equally real—since it really happens—happenings are not of equal worth. Their respective consequences, their import, varies tremendously. Counterfeit money, although real (or rather *because* real), is really different from valid circulatory medium, just as disease is really different from health; different in specific structure and so different in consequences. In occidental thought, the Greeks were the first to draw the distinction between the genuine and the spurious in a generalized fashion and to formulate and enforce its tremendous significance for the conduct of life. But since they had at command no technique of experimental analysis and no adequate technique of mathematical analysis, they were compelled to treat the difference of the true and the false, the dependable and the deceptive, as signifying two kinds of existence, the truly real and the apparently real.

Two points can hardly be asserted with too much emphasis. The Greeks were wholly right in the feeling that questions of good and ill, as far as they fall within human control, are bound up with discrimination of the genuine from the spurious, of "being" from what only pretends to be. But because they lacked adequate instrumentalities for coping with this difference in specific situations, they were forced to treat the difference as a wholesale and rigid one. Science was concerned with vision of ultimate and true reality; opinion was concerned with getting along with apparent realities. Each had its appropriate region permanently marked off. Matters of opinion could never become matters of science; their intrinsic nature forbade. When the practice of science went on under such conditions, science and philosophy were one and the same thing. Both had to do with ultimate reality in its rigid and insuperable difference from ordinary occurrences.

We have only to refer to the way in which medieval life wrought the philosophy of an ultimate and supreme reality into the context of practical life to realize that for centuries political and moral interests were bound up with the distinction between the absolutely real and the relatively real. The difference was no matter of a remote technical philosophy, but one which controlled life from the cradle to the grave, from the grave to the endless life after death. By means of a vast institution, which in effect was state as well as church, the claims of ultimate reality were enforced; means of access to it were provided. Acknowledgment of The Reality brought security in this world and salvation in the next. It is not necessary to report the story of the change which has since taken place. It is enough for our purposes to note that none of the modern philosophies of a superior reality, or *the* real object, idealistic or realistic, holds that its insight makes a difference like that between sin and holiness, eternal condemnation and eternal bliss. While in its own context the philosophy of ultimate reality entered into the vital concerns of men, it now tends to be an ingenious dialectic

exercised in professorial corners by a few who have retained ancient premises while rejecting their application to the conduct of life.

The increased isolation from science of any philosophy identified with the problem of *the* real is equally marked. For the growth of science has consisted precisely in the invention of an equipment, a technique of appliances and procedures, which, accepting all occurrences as homogeneously real, proceeds to distinguish the authenticated from the spurious, the true from the false, by specific modes of treatment in specific situations. The procedures of the trained engineer, of the competent physician, of the laboratory expert, have turned out to be the only ways of discriminating the counterfeit from the valid. And they have revealed that the difference is not one of antecedent fixity of existence, but one of mode of treatment and of the consequences thereon attendant. After mankind has learned to put its trust in specific procedures in order to make its discriminations between the false and the true, philosophy arrogates to itself the enforcement of the distinction at its own cost.

More than once, this essay has intimated that the counterpart of the idea of invidiously real reality is the spectator notion of knowledge. If the knower, however defined, is set over against the world to be known, knowing consists in possessing a transcript, more or less accurate but otiose, of real things. Whether this transcript is presentative in character (as realists say) or whether it is by means of states of consciousness which represent things (as subjectivists say), is a matter of great importance in its own context. But, in another regard, this difference is negligible in comparison with the point in which both agree. Knowing is viewing from outside. But if it be true that the self or subject of experience is part and parcel of the course of events, it follows that the self *becomes* a knower. It becomes a mind in virtue of a distinctive way of partaking in the course of events. The significant distinction is no longer between the knower *and* the world; it is between different ways of being in and of the movement of things; between a brute physical way and a purposive, intelligent way.

There is no call to repeat in detail the statements which have been advanced. Their net purport is that the directive presence of future possibilities in dealing with existent conditions is what is meant by knowing; that the self becomes a knower or mind when anticipation of future consequences operates as its stimulus. What we are now concerned with is the effect of this conception upon the nature of philosophic knowing.

As far as I can judge, popular response to pragmatic philosophy was moved by two quite different considerations. By some it was thought to provide a new species of sanctions, a new mode of apologetics, for certain religious ideas whose standing had been threatened. By others, it was welcomed because it was taken as a sign that philosophy was about to surrender its otiose and speculative remoteness; that philosophers were beginning to recognize that philosophy is of account only if, like everyday knowing and like science, it affords guidance to action and thereby makes a difference in the event. It was welcomed as a sign that philosophers were willing to have the worth of their philosophizing measured by responsible tests.

I have not seen this point of view emphasized, or hardly recognized, by

professional critics. The difference of attitude can probably be easily explained. The epistemological universe of discourse is so highly technical that only those who have been trained in the history of thought think in terms of it. It did not occur, accordingly, to non-technical readers to interpret the doctrine that the meaning and validity of thought are fixed by differences made in consequences and in satisfactoriness, to mean consequences in personal feelings. Those who were professionally trained, however, took the statement to mean that consciousness or mind in the mere act of looking at things modifies them. It understood the doctrine of test of validity by consequences to mean that apprehensions and conceptions are true if the modifications affected by them were of an emotionally desirable tone.

Prior discussion should have made it reasonably clear that the source of this misunderstanding lies in the neglect of temporal considerations. The change made in things by the self in knowing is not immediate and, so to say, cross-sectional. It is longitudinal—in the redirection given to changes already going on. Its analogue is found in the changes which take place in the development of, say, iron ore into a watch-spring, not in those of the miracle of transubstantiation. For the static, cross-sectional, non-temporal relation of subject and object, the pragmatic hypothesis substitutes apprehension of a thing in terms of the results in other things which it is tending to effect. For the unique epistemological relation, it substitutes a practical relation of a familiar type:—responsive behavior which changes in time the subject-matter to which it applies. The unique thing about the responsive behavior which constitutes knowing is the specific difference which marks it off from other modes of response, namely, the part played in it by anticipation and prediction. Knowing is the act, stimulated by this foresight, of securing and averting consequences. The success of the achievement measures the standing of the foresight by which response is directed. The popular impression that pragmatic philosophy means that philosophy shall develop ideas relevant to the actual crises of life, ideas influential in dealing with them and tested by the assistance they afford, is correct.

Reference to practical response suggests, however, another misapprehension. Many critics have jumped at the obvious association of the word pragmatic with practical. They have assumed that the intent is to limit all knowledge, philosophic included, to promoting "action," understanding by action either just any bodily movement, or those bodily movements which conduce to the preservation and grosser well-being of the body. James' statement, that general conceptions must "cash in" has been taken (especially by European critics) to mean that the end and measure of intelligence lies in the narrow and coarse utilities which it produces. Even an acute American thinker, after first criticizing pragmatism as a kind of idealistic epistemology, goes on to treat it as a doctrine which regards intelligence as a lubricating oil facilitating the workings of the body.

One source of the misunderstanding is suggested by the fact that "cashing in" to James meant that a general idea must always be capable of verification in specific existential cases. The notion of "cashing in" says nothing about the breadth or depth of the specific consequences. As an empirical doctrine, it

could not say anything about them in general; the specific cases must speak for themselves. If one conception is verified in terms of eating beefsteak, and another in terms of a favorable credit balance in the bank, that is not because of anything in the theory, but because of the specific nature of the conceptions in question, and because there exist particular events like hunger and trade. If there are also existences in which the most liberal esthetic ideas and the most generous moral conceptions can be verified by specific embodiment, assuredly so much the better. The fact that a strictly empirical philosophy was taken by so many critics to imply an *a priori* dogma about the kind of consequences capable of existence is evidence, I think, of the inability of many philosophers to think in concretely empirical terms. Since the critics were themselves accustomed to get results by manipulating the concepts of "consequences" and of "practice," they assumed that even a would-be empiricist must be doing the same sort of thing. It will, I suppose, remain for a long time incredible to some that a philosopher should really intend to go to specific experiences to determine of what scope and depth practice admits, and what sort of consequences the world permits to come into being. Concepts are so clear; it takes so little time to develop their implications; experiences are so confused, and it requires so much time and energy to lay hold of them. And yet these same critics charge pragmatism with adopting subjective and emotional standards!

As a matter of fact, the pragmatic theory of intelligence means that the function of mind is to project new and more complex ends—to free experience from routine and from caprice. Not the use of thought to accomplish purposes already given either in the mechanism of the body or in that of the existent state of society, but the use of intelligence to liberate and liberalize action, is the pragmatic lesson. Action restricted to given and fixed ends may attain great technical efficiency; but efficiency is the only quality to which it can lay claim. Such action is mechanical (or becomes so), no matter what the scope of the preformed end, be it the Will of God or *Kultur*. But the doctrine that intelligence develops within the sphere of action for the sake of possibilities not yet given is the opposite of a doctrine of mechanical efficiency. Intelligence *as* intelligence is inherently forward-looking; only by ignoring its primary function does it become a mere means for an end already given. The latter *is* servile, even when the end is labeled moral, religious, or esthetic. But action directed to ends to which the agent has not previously been attached inevitably carries with it a quickened and enlarged spirit. A pragmatic intelligence is a creative intelligence, not a routine mechanic.

All this may read like a defense of pragmatism by one concerned to make out for it the best case possible. Such is not, however, the intention. The purpose is to indicate the extent to which intelligence frees action from a mechanically instrumental character. Intelligence is, indeed, instrumental *through* action to the determination of the qualities of future experience. But the very fact that the concern of intelligence is with the future, with the as-yet-unrealized (and with the given and the established only as conditions of the realization of possibilities), makes the action in which it takes effect generous and liberal; free of spirit. Just that action which extends and approves intelligence has an

intrinsic value of its own in being instrumental:—the intrinsic value of being informed with intelligence in behalf of the enrichment of life. By the same stroke, intelligence becomes truly liberal: knowing is a human undertaking, not an esthetic appreciation carried on by a refined class or a capitalistic possession of a few learned specialists, whether men of science or of philosophy.

More emphasis has been put upon what philosophy is not than upon what it may become. But it is not necessary, it is not even desirable, to set forth philosophy as a scheduled program. There are human difficulties of an urgent, deep-seated kind which may be clarified by trained reflection, and whose solution may be forwarded by the careful development of hypotheses. When it is understood that philosophic thinking is caught up in the actual course of events, having the office of guiding them towards a prosperous issue, problems will abundantly present themselves. Philosophy will not solve these problems; philosophy is vision, imagination, reflection—and these functions, apart from action, modify nothing and hence resolve nothing. But in a complicated and perverse world, action which is not informed with vision, imagination, and reflection, is more likely to increase confusion and conflict than to straighten things out. It is not easy for generous and sustained reflection to become a guiding and illuminating method in action. Until it frees itself from identification with problems which are supposed to depend upon Reality as such, or its distinction from a world of Appearance, or its relation to a Knower as such, the hands of philosophy are tied. Having no chance to link its fortunes with a responsible career by suggesting things to be tried, it cannot identify itself with questions which actually arise in the vicissitudes of life. Philosophy recovers itself when it ceases to be a device for dealing with the problems of philosophers and becomes a method, cultivated by philosophers, for dealing with the problems of men.

Emphasis must vary with the stress and special impact of the troubles which perplex men. Each age knows its own ills, and seeks its own remedies. One does not have to forecast a particular program to note that the central need of any program at the present day is an adequate conception of the nature of intelligence and its place in action. Philosophy cannot disavow responsibility for many misconceptions of the nature of intelligence which now hamper its efficacious operation. It has at least a negative task imposed upon it. It must take away the burdens which it has laid upon the intelligence of the common man in struggling with his difficulties. It must deny and eject that intelligence which is naught but a distant eye, registering in a remote and alien medium the spectacle of nature and life. To enforce the fact that the emergence of imagination and thought is relative to the connexion of the sufferings of men with their doings is of itself to illuminate those sufferings and to instruct those doings. To catch mind in its connexion with the entrance of the novel into the course of the world is to be on the road to see that intelligence is itself the most promising of all novelties, the revelation of the meaning of that transformation of past into future which is the reality of every present. To reveal intelligence as the organ for the guidance of this transformation, the sole director of its quality, is to make a declaration of present untold significance for action. To elaborate these convictions of the connexion of intelligence with what men undergo because of

their doings and with the emergence and direction of the creative, the novel, in the world is of itself a program which will keep philosophers busy until something more worth while is forced upon them. For the elaboration has to be made through application to all the disciplines which have an intimate connexion with human conduct:—to logic, ethics, esthetics, economics, and the procedure of the sciences formal and natural.

I also believe that there is a genuine sense in which the enforcement of the pivotal position of intelligence in the world and thereby in control of human fortunes (so far as they are manageable) is the peculiar problem in the problems of life which come home most closely to ourselves—to ourselves living not merely in the early twentieth century but in the United States. It is easy to be foolish about the connexion of thought with national life. But I do not see how any one can question the distinctively national color of English, or French, or German philosophies. And if of late the history of thought has come under the domination of the German dogma of an inner evolution of ideas, it requires but a little inquiry to convince oneself that that dogma itself testifies to a particularly nationalistic need and origin. I believe that philosophy in America will be lost between chewing a historic cud long since reduced to woody fiber, or an apologetics for lost causes (lost to natural science), or a scholastic, schematic formalism, unless it can somehow bring to consciousness America's own needs and its own implicit principle of successful action.

This need and principle, I am convinced, is the necessity of a deliberate control of policies by the method of intelligence, an intelligence which is not the faculty of intellect honored in text-books and neglected elsewhere, but which is the sum-total of impulses, habits, emotions, records, and discoveries which forecast what is desirable and undesirable in future possibilities, and which contrive ingeniously in behalf of imagined good. Our life has no background of sanctified categories upon which we may fall back; we rely upon precedent as authority only to our own undoing—for with us there is such a continuously novel situation that final reliance upon precedent entails some class interest guiding us by the nose whither it will. British empiricism, with its appeal to what has been in the past, is, after all, only a kind of *a priorism*. For it lays down a fixed rule for future intelligence to follow; and only the immersion of philosophy in technical learning prevents our seeing that this is the essence of *a priorism*.

We pride ourselves upon being realistic, desiring a hardheaded cognizance of facts, and devoted to mastering the means of life. We pride ourselves upon a practical idealism, a lively and easily moved faith in possibilities as yet unrealized, in willingness to make sacrifice for their realization. Idealism easily becomes a sanction of waste and carefulness, and realism a sanction of legal formalism in behalf of things as they are—the rights of the possessor. We thus tend to combine a loose and ineffective optimism with assent to the doctrine of take who take can: a deification of power. All peoples at all times have been narrowly realistic in practice and have then employed idealization to cover up in sentiment and theory their brutalities. But never, perhaps, has the tendency been so dangerous and so tempting as with ourselves. Faith in the power of intelligence

to imagine a future which is the projection of the desirable in the present, and to invent the instrumentalities of its realization, is our salvation. And it is a faith which must be nurtured and made articulate: surely a sufficiently large task for our philosophy.