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Dewey and the Experimental Attitude in American Culture

An Essay in Memory of John Dewey, 1859-1952

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I

IN ANY DISCUSSION dealing with the ideas of John Dewey, a basic assumption is that the enterprise of philosophy is not outside and above human activities, but that, like science, religion, and the arts, it is an integral part of human culture. A second assumption, neither so elementary nor possibly so acceptable can be added: that philosophy is not only an integral part of a culture but also that it reflects certain conflicts and deformations in that culture. This does not refer simply to general disputes about value, nor, much less, to any monolithic form of Marxian conflict: the tensions Dewey has in mind are those set up by the resistance which traditional ways of thinking and acting have developed to the forces of scientific knowledge. In over-simple language, the cultural conflict between morals and technology is the fundamental setting for a cultural emergent such as philosophy. Conversely, the resolution of that conflict would be indicated as a major orientation of philosophic effort—to restore integration between man's beliefs about the world and his beliefs about how to live in that world.

One further assumption needs to be made, an historical assumption: that man's beliefs about his conduct, individual and social, are largely the ceremonial and institutional hang-overs from a prescientific culture. It need hardly be added that similar vestigial beliefs once characterized man's attitudes about the physical world, or that the revolutionary work of the founders of modern philosophy in the seventeenth century was addressed in great part to overcoming the gap between ceremonial ways

of looking upon nature and the new ways proposed by mechanics and mathematics. This is still a continuing task for contemporary philosophy, and one which is being successfully undertaken. The argument here is that a similar work of integration still confronts philosophy in another area where relatively little has been done: philosophy must attempt to do for the recent prodigious developments in the science of man what it once did, and is still doing, for physical inquiry.

The Morals-Technology Conflict

THIS ARGUMENT must have many elements of the obvious, even for those most opposed to the views here expressed. For, positively or negatively, directly or indirectly, philosophy *has* reacted to the shock of the twentieth century, to the great dislocations in contemporary culture which are being celebrated one way or the other as we come into the second half of that century. We are being told by journalists, by historians, by novelists and poets and playwrights, by religious leaders, that the twentieth century (which, of course, began with World War I) is one of disillusion and foreboding and anxiety. The easy assumptions with which the era began, those allegedly "pragmatic" assumptions of progress, of reasonableness, of human decency, of scientific validity are being given up; and we don't have to be told that the trauma is severe. Whether this diagnosis is correct need not engage us at the moment; for the point is simply that the conflict between man's beliefs and his practices is being recognized as almost the sign of modern times, and its recognition has become indeed the mark of sophistication. No one seems prepared to deny that there is a culture conflict between morals and technology. Nor has contemporary philosophy been insensitive to it.

What is being proposed by a philosophy such as Dewey's is not, however, just any old sensitivity. Much less is it a public display of hand-wringing. Still less is it the official rationalization of a culture, which is what philosophy so often has been. The sensitivity being asked for here is twofold: (1) A recognition that the morals-technology conflict, which in the Atomic Age has become incandescent, is nothing new but has been in fact a permanent, glowing expression of the fundamental dualism in Western culture; and (2) the further recognition that such a dualism is institutional rather than logical, and that the way to overcome it has been available ever since the Scientific Revolution. These points need to be elaborated, since they are essential for any understanding of what a pragmatically-reconstructed philosophy means and of what it can be expected to contribute.

To be sure, if philosophy has a natural history behind it (as the above statements suggest) that history ought to be traced. If even to mention this is presumptuous, at least one might be expected, in the baldest and bleakest way, to sketch a few lines for that tracing. They would be to the effect that the long-time interest of traditional philosophy has been (a) to discover a way of knowing that is sure, universal, and revelatory; and (b) to discover a form of reality that is absolute, trustworthy, and the source and preserver of human good as well as of human knowledge. These dominant interests have been captured in Dewey's now familiar phrase, "the quest for certainty." This philosophic quest, the outline would continue, can best be understood as a striking illumination of a background defined by conditions the very reverse of these honorific aims—a background dark, uncertain, fraught with peril and mystery, the setting, clearly, of a primitive and prescientific culture where what is wanted is a device for propitiating a forbidding and unintelligible world. Proto-philosophy would develop in the same general area in which were found myth and poetic drama, religion and worship.

The 'Negation of "Certainty"

SCIENCE AND THE PRACTICAL ARTS point in another direction, that of overt activity where the results are always uncertain. Here the tools are refractory, the senses incomplete and untrustworthy, the results (although often startling) can never be guaranteed. The problems of the artisan and craftsman, of the eoscientist, were often too much for him. Was it not because he was involved in an inferior and secondary realm of contingency, of "mere" fact, in a world of sensory imperfection and uncertainty? Beyond this was the other world, the real and certain world; to approach it demanded a different and more refined tool than that of the artisan. This would be a kind of knowledge—to be called philosophical or metaphysical—designed to reveal reality, to give access to it, to contemplate it. Repose in the finality of such a real world is the goal of philosophy as knowledge, and of philosophy as value—*i.e.*, as a concern for man's purposes and ends. Contrariwise, the world of contingent appearance is just as evidently the province of means, of technology—the neutral and morally epicene domain of science.

Here, then, is a fragmentary sketch of the classic dualism which without question has become an integral part of our culture. It has been institutionalized in the Christian religion and in the official systems of Western metaphysics, both of them based on the Greek notion of the two worlds of reality and appearance. This is a notion (putting aside the

neat way it rationalized the prevailing class structure of ancient Greece) which is itself a sophisticated version of the primitive need for a compensatory heaven of absolute goods. Yet the idea is as contemporary as it is primitive, and I should suspect that one reason why the rise of scientific method—a matter of only four centuries at most—has not been able to make decisive impact upon that idea is that such a method developed in a cultural setting which was already dominated by the concept of intrinsic value. Both philosophy and theology had conspired to give ethical and spiritual sanction to ideals as such; both had kept and are still keeping alive a dualism going back to man's first bewildered response to the world about him. And this is why the Scientific Revolution—a genuine revolution if there ever was one—has been confronted by a desperate counter-revolution ever since. For experimental inquiry completely negated the traditional "quest for certainty." Above all did it repudiate that interpretation of knowledge which made it revelatory of some monolithic reality, fixed and absolute. This needs to be developed just a little.

It is familiar enough that science is not constituted by any particular body of material. The word "method" is crucial. In fact, to overstate the point for emphasis, the conviction that method is more important than conclusion is the very essence of scientific operationalism. Historically it was indeed this concentration on technique which provided the magic to transform out of a supernatural metaphysics what we know as natural science. No worship of natural science is intended by such an observation. Nor does the experimental method mean the carrying on of specific laboratory routines. What is fundamental for experimentalism is opposition to fixed ends, to *a priori* system-making, to the concept of changelessness, and to the divorce of thought from action. Positively, there is the insistence on provisionalism and tentativeness, on the substitution of self-correcting working hypotheses for immutable principles. For these reasons, science is by no means limited to the professional scientist; it represents an attitude which can function in any area of experience, an attitude of free and effective intelligence.

This is why science, or any philosophy based on science, cannot accept problems or the properties of objects (much less something called Reality) which are set up in advance of experimental operations, set up, that is to say, in terms of a certain and superior existence which is waiting only to be revealed. Scientific knowing implies the control and change of experienced objects, not their revelation. In Dewey's words, "any allegiance to even the smallest minimum of belief so fixed in advance that

it can never be modified is unscientific." In short, scientific knowing is a way of experiencing objects which introduces control over them. And this knowing implies an operational technique, one which, among other things, substitutes "data" for "objects." In this way, the value of knowledge depends upon the way in which it is reached; and that way indicates provisionalism, overt activity, and the assumption that nature does react to manipulation, that it is not unchanging and aloof. The supreme value of scientific knowing turns out to be the supremacy of method, whereas the supreme value of classic philosophic knowing was the quest for certainty.

II

THIS HAS BEEN A BARE OUTLINE of what is foundational for the pragmatic (at least Deweyan) interpretation of the place of philosophy in culture, particularly in a technological or scientific culture. It is evident that many problems are raised by such an interpretation. All that we can do here is to call attention to a few of them and to attempt a brief appraisal of those which might be of especial interest.

Perhaps as thorny a problem as any is one so familiar as to be banal: are the social sciences, at least to the degree in which they are value disciplines, indeed amenable to scientific procedure?

Scientific Method and the Social Sciences

NOW, THIS IS SO MOMENTOUS an issue, even if banal, that I hesitate to raise it, especially since all that can be done is to present a point of view. Yet that point of view needs to be presented if a philosophical position like this is to be judged. To save time, it may be presented in a series of deliberately unadorned assumptions:

(1) Scientific method comprises (a) an attitude of mind, and (b) a procedure for handling problems. The attitude of mind—self-critical, tentative, operational—is a constant factor, whereas the procedure can vary as does the material.

(2) Each area of experience is equally real and demands its own treatment. (As a matter of fact, the experimentalism which Dewey constantly talks about is, in large part, the experimentalism of the anthropologist rather than of the physics laboratory; that is, it is directed chiefly to the techniques and concepts of social change.)

(3) The fact-value dichotomy is a cultural, not a logical, dualism, and can stand only if facts or data are regarded as purely neutral and objective, and values are viewed as some kind of subjective aberration. Neither of these positions can resist critical analysis, for data always in-

clude some element of selectivity, and values are (to say the least!) as natural and as significant as the most obdurate datum. This, at any rate, is what a serious philosophy of naturalism must support.

To these flat assumptions may be added two corollaries or postscripts, one in the form of a question: (A) Whatever may be said by positivist at one extreme or idealist at the other, social scientists today *are* handling values, despite the alleged "theoretical" impossibility of doing just that. I refer particularly to the value studies of Kluckhohn at Harvard, to the perception experiments of Ames and Cantril at Hanover and at Princeton, to the "flash"-technique studies in esthetics by Sherman at Ohio State, to the work in interpersonal psychiatry of men like Kardiner and Sullivan, which rests so heavily on the pragmatic theories of George Mead; and there are other studies beside these.¹ (B) If values cannot be handled "scientifically," what are the alternatives? What is the substitute for the critical, self-corrective, tentative, and operational behavior which makes up scientific method?

Still another question must be raised in this context, *i.e.*, the relation between values and the social sciences. Is there any philosophy of history implicit or explicit in an approach such as this? Although Dewey himself has not developed any extended philosophy of history, his entire interpretation of philosophy has been historical and cultural. Moreover, detailed historical analyses have played a conspicuous part in every major work of his, and in an important chapter (XII) of his *LOGIC* he specifically talks about history as a prime example of what he calls "judgments of spatial-temporal determination."

As might be expected, historical inquiry *qua* inquiry (*i.e.*, in terms of the pattern of its development) is no different from any other kind: it arises, first of all, out of a problematic or indeterminate situation, the resolution of which is the genesis of any form of reflective activity, from the solving of common sense problems to the highest reaches of astrophysics. This resolving of a problematic situation develops through a series of steps which have been variously described by different investigators, but they correspond roughly to the stages of diagnosis and of gathering data, followed by the instituting, developing, and verifying of hypotheses. Historical inquiry is not exempt from some such pattern as this.

Nor is it exempt from the selective emphasis which, just as in the

¹ The best quick reference for these experiments will be found in an article in this *JOURNAL*, Vol. 11, No. 1 (October, 1951) by the late Horace Fries, "Perception and Value Inquiry."

most rigorous of physical sciences, determines what shall be regarded as data—namely, what is important. This emphasis is, of course, prominent in men like Carl Becker and Charles Beard (both of whom regarded themselves as, in general, followers of Dewey), and is the source of a familiar and long-standing quarrel in historiography. I shall venture into it no more than ankle-deep. As I understand it, the problem is simply whether history can escape from its own process, whether it will not always have to be rewritten, for, in Dewey's words, "as the new present arises, the past is the past of a different present." The selection of an historical point of view "is as truly a logical postulate as are those recognized as such in mathematical propositions. . . . Men have their own problems to solve, their own adaptations to make. They face the future, but for the sake of the present, not of the future. In using what has come to them as an inheritance from the past they are compelled to modify it to meet their own needs, and this process creates a new present in which the process continues."²

Cumulative Continuity in History

AN INTERPRETATION such as this is easily misunderstood by being regarded as a kind of subjectivism, just as pragmatism itself, in some circles, is considered an obscure brand of idealism. But the historical relativism and selectivity Dewey has in mind are clearly objective and cultural, since every inquiry and inquirer must be understood as operating in and out of a social matrix constituted by its own specific, objective conditions and conflicts. Nor is there a single, overwhelming matrix which, as in the Marxist interpretation, produces a unilinear and monistic historical development; on the contrary, there is an inexhaustible pluralism in any culture, which history can ignore no more successfully than can philosophy. There is another possible source of misunderstanding in the present argument, *i.e.*, does this signify that history is "merely" cultural? What about its "metaphysical" bases? Namely, if "history" as writing and record and science changes and develops, what about "history" as not the account of but as the event itself? What about central categories like "process" and "determinism"?

Concepts as "philosophical" as these would require more than the space which can be allotted to them here, but since they are involved in the present discussion they cannot be passed over entirely. What I think needs to be pointed out is the significance of the idea of "continuity." After all, is it not this that separates "history" from "annals"? History

² *Logic*, pp. 239, 236.

is not a number of truncated and undeveloped episodes; rather, in Dewey's language, it is a "cumulative continuity of movement in a given direction toward stated outcomes." This in no way disparages the intrinsic and what may be called the "esthetic" or consummatory status of episodes, but it does call attention to the importance of relations: pattern is as essential as individuality.

Now, this point of view carries over from history to what, pretentiously and perhaps inaccurately, may be called "metaphysics," for the category of "event"—which is a prime category for all contemporary philosophers however far apart they may be in other respects—illustrates precisely the relation between the unique and the relational. An event is unique, but it is unique as is a history. That is, even a flash of lightning has background and continuity. It is not a complete fragmentation, no more than fragmented annals constitute a history. Continuity "excludes complete rupture on one side and mere repetition of identities on the other; it precludes reduction of the 'higher' to the 'lower' just as it precludes complete breaks and gaps. The growth and development of any living organism from seed to maturity illustrates the meaning of continuity."³ So does a history.

It is in this context that the "metaphysical" categories of process and determinism must be placed. Why quotation marks around the words "metaphysics" and "metaphysical"? The reason is that the terms traditionally refer to a point of view which is conspicuously absent from a philosophy such as this. That traditional point of view is almost humorously illustrated by Bertrand Russell when, in one of his many criticisms of Dewey, he complains that "we are told very little about the nature of things before they are inquired into." Dewey's answer to this complaint may point up the difference in attitudes that is being referred to here. "If I have said or tried to say the tiniest bit about the 'nature of things' prior to inquiry into them, I have not only done something completely contradictory to my own position but something that seems to me inherently absurd . . . I have always supposed that this sort of telling is the specific business of the inquiries themselves."⁴ Now, this does not mean that there is no "metaphysics" in Dewey's philosophy, if by the term is meant no more than certain basic assumptions or hypotheses about the referential applicability of human inquiry, chiefly scientific. Even the strict positivist must make certain assumptions about the source of sense data.

³ *Logic*, p. 23. See also S. Ratner's discussion of Dewey's philosophy of history in *John Dewey: Philosopher of Science and Freedom*, edited by Sidney Hook, New York, 1950.

⁴ P. A. Schilpp, ed., *Library of Living Philosophers*, Vol. 1, p. 546.

But "metaphysics" as a standard term in philosophy has usually connoted something quite beyond this. It has suggested that the "real" world can be discovered only through a "real" knowledge, one quite unlike the methods of discovery employed by science. This extra-special instrument of knowledge may be called pure reason, intuition, understanding, or something else; in any case it is able to pass beyond the perimeter of ordinary experience and thereby to substitute reality for appearance. Classic "metaphysics" has always entailed that "quest for certainty" which was to distinguish philosophy from science.

Nature Can Be Controlled

IF, THEN, WE CAN USE the term "metaphysical" loosely and minus such non-naturalistic connotations, the assumptions which seem to underlie the approach being sketched here would add up to something like this: The world and human experience are not antithetical; nature can be known, handled, and—to a degree which is significant—controlled. That is, predictions can be made and verified on the basis of human operations, and changes in nature can be engineered by man. These assumptions are, of course, commonplaces in science. They also should be for philosophy—a statement which is itself another assumption. Now, there is classical metaphysical respectability to these ideas; they are tied up with the ancient controversy between determinism and indeterminism, between necessity and probability, the wide-open world of William James versus the block universe of the absolute idealist. The contemporary pragmatist does not, however, ordinarily enter into the dialectic of that quarrel, nor is he given to making absolute judgments about it, as has been the custom in classic metaphysics. He is content with the hypotheses just mentioned, which serve as a working basis for the actual operations which science does perform.⁵

This is perhaps why words like "process" and "determinism" are notably inconspicuous in Dewey's writings, despite the fact that he is regarded as pre-eminently a philosopher of change and evolution. He does, however, speak of "events" and "continuity", the reason being, I take it, that these terms have more of the flavor of scientific procedure than of metaphysical pronouncement. In any case, Dewey sees no contradiction between a world in process and a world of continuity, of predictable law, just as he sees no conflict between a nature reported on by science and a world of emerging value. It is only the reductionist type of naturalism

⁵ Cf. the present writer's *Philosophy and the Social Order*, New York, 1947, pp. 391-4.

or the dialectical brand of determinism which can find no proper place for values or events. Dewey, it is needless to add, belongs to neither of these schools. Possibly a few lines of his may give the feel of an attitude such as this: ". . . Constancies, whether the larger one termed laws or the lesser one termed facts, are statistical in nature . . . They are not descriptions of the exact structure and behavior of any *individual* thing . . . No mechanically exact science of an individual is possible. An individual is a history unique in character . . . Choice is not arbitrary, not in a universe like this one, a world which is not finished and which has not consistently made up its mind where it is going and what it is going to do . . . True wisdom, discovers in thoughtful observation and experiment the method of administering the unfinished processes of existence so that frail goods shall be substantiated, secure goods be extended, and the precarious promises of good that haunt experienced things be more liberally fulfilled."⁶

III

WORDS AS ELOQUENT as these might well serve to close any essay. But at the risk of anti-climax, I should like to conclude by suggesting that the place of Dewey's pragmatism in American culture might well be extended to that of naturalism or scientific humanism in American culture. For pragmatism might be regarded as simply a school of thought focussed on a particular methodology. But what really is involved here, especially in the current attacks on pragmatism, is not the fate of some particular movement but the fate of a whole cultural temper, indeed, the spirit of an age. We began this paper by pointing to the close relation between philosophy and culture; we might end by commenting on a close, if perverse, relation between the two which is being celebrated today—our new "failure of nerve." The syndrome is now commonplace: We live in a wasteland of science and of man's trust in his own unaided reason. For man is truly a depraved creature, trying vainly to pull himself out of a morass by tugging faithfully at his bootstraps. His very history is indicative of a coming doom: we are at the end of an age. We are also advised, as the issue shifts a little, that science is bankrupt in its attempts to handle social problems, that what we need is good will alone and faith in some ultimate source of value. Since man is "merely" an animal he must justify his values, even such a one as democracy, by something above himself. Natural man is not sufficient by himself to justify himself. He must rely on a super-nature.

⁶ *Quest For Certainty*, p. 248 ff.; *Experience and Nature*, pp. 76-7.

Critical Inquiry in the Social Sciences

NOW, THE CHIEF ASSUMPTION on which this entire argument rests is the contention that intelligent inquiry has already been installed as a conspicuous part of human culture and that it has failed. This contention is completely untenable. In fact, the very reverse seems the case, for we have failed precisely where scientific method has not been tried. The classic dualism of Western culture has worked powerfully against the employment of intelligent inquiry in questions of economics and politics, of religion and ethics.

Anti-naturalists contend that the bankruptcy of modern values is to be blamed on the failure of the scientific spirit. If ever cart were put before horse, this is it. It is like blaming marriage for divorce. It confuses context and agent. The humanist and scientific naturalist, the follower of Dewey, has been striving to penetrate the area of value, has been trying to combat the supernatural pessimism which festers in the unsolved value-problems with which society has been ridden. It is a malicious caricature to assume that we have already tried the technique of critical inquiry here.⁷

On the contrary, we have tried from the beginning—and are trying it again today—to gain repose in the finality of a “real”, trans-empirical world. We are still questing for certainty. Before the Scientific Revolution this quest might have been intelligible. Now it is surrender. Any other name for it is a euphemism. Certainly man has not solved his great problems; in many areas he has made barely a start, if that. But to act as if scientific humanism has had a long record of failure and must be supplanted by something else is to misread history disastrously and dishonestly. It would be to assume that the tools of naturalism and intelligence have been man’s consistent and longtime tools. Scientific humanism, however, can be no older than science itself; actually it is much younger, for science has given its first allegiance to conquering physical nature rather than to saving man from himself. This may or may not be a criticism of the scientific enterprise: it is an indication of its youth. The struggle to turn the methods of science to the problems of man is just beginning; to give up that struggle would be surrender of the most desperate and indefensible sort.

If “pragmatism” means anything in American culture, it is a refusal to accept that kind of surrender.

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⁷ Cf. *Philosophy and the Social Order*, pp. 375 ff.