Dewey, Dualism, and a Basis for Challenging the Mind and Nurturing the Spirit

TERRY ALLEN

In philosophy, the idea of dualism involves, at least, the question of the existence of two, rather than one, substance or "thing." For example, am I to perceive myself as separate from the world? A subject among objects? Can creation be distinguished from a creator?

John Dewey suggested that dualisms were the cause of many problems in current ways of thinking. He asserts that the problems of dualistic thinking have themselves originated out of the assumptions which have generated two major philosophical problems: (1) that of "restoring integration and cooperation between man's beliefs about the world in which he lives and his beliefs about values and purposes that should direct his conduct"; this involves "the relation that exists between the beliefs about the nature of things *due to natural science* to beliefs about *values* — using that word to designate whatever is taken to have rightful authority in the direction of conduct."[1,2] and (2) "the problem of the relation of physical science to the things of ordinary experience." And to his mind, these two issues "have controlled the main course of modern thought."[3]

He believed that the problems themselves had their source in certain assumptions and premises "inherited from traditions now shown to be false" and that the dualisms to which he referred were based on an "isolation of cognitive experience and its subject-matter from other modes of experience and *their* subject matters."[4] This isolation (hence, dualism) has led us, he contended to the disparagement and discounting of ordinary qualitative (non-cognitive) experience. That is, men came to count as inferior the esthetic, moral, and practical aspects of life which are experienced by way of "love, desire, hope, fear, purpose and the traits characterizing human individuality."[5,6] However, he asserted that if we do not count these aspects of experience to be inferior because of their non-cognitive status, then the isolation (dualism) becomes "an effort to justify the latter (dualism) by assertion of a superscientific, supra-empirical transcendent *a priori* realm."[7]

Thus, Dewey asserted two explanations for the problems manifested in "modern epistemological theory," (1) the supposed separation of certain kinds of experience from knowledge (the latter being more highly valued), and (2) a suggested attempt to provide a justification for a transcendent realm. He sought to establish an understanding of at least one strain of dualistic thought, on the basis of historical and cultural conditions in ancient Greece. There, he suggested, a leisure class had been established and

sought to maintain its privileged position through emphasis on the superiority of reflective thought (which *they* had time for); there was an implied justification to perpetuate society's hierarchical order in which *upper* and *lower* classes were accepted. Dewey's discussion of historical systems was governed by "the belief that the cultural causes . . . which led to the doctrine of the supremacy of the cognitive experience and the consequent supposed necessity for relegating the things of all non-cognitive experiences to an inferior status, no longer apply."[8] (Dewey's attribution of shifting truth-value to psychological motives based on what is assumed to be culturally engendered needs or conditions, is a common move, I believe, by "post-modern" thinkers. Their assertion that truth-value or accuracy of analysis, shifts with change in culture or situation follows from that presupposition. It is an intellectual move which has the effect of discounting the emphases and conclusions of previous thinkers, based not on the actual arguments and evidence but on what we, some centuries hence, perceive to be the force of their conditions. What they saw, and how they interpreted and applied what they saw, is conceived to be primarily a product of culture rather than of more or less correct reasoning processes about what *is*. To assert this seems to be a transcendental move based on a kind of psychological dogma. But it requires a closer and insightful look to see (1) if indeed our condition as people has actually changed to the degree claimed, (2) whether change is itself sufficient to require a shift in some philosophical convictions or position, and (3) if so, *which* assertions, due to a new situation or perhaps additional information, need be justifiably altered. Dewey appeared to assume that each of the dualisms he perceived in classical thought was the effect of historical situation or temporal needs rather than the result of analyses which accurately (or not) portrayed *actual finds* which we also may approach and examine. The problem of such dualism would be solved, he felt, if "the philosophical theory of experience is brought up to date by acknowledgement of the standpoint and conclusions of scientific biology and cultural anthropology and of the import of the experimental method in knowing. . ."[9] It will be seen that his own problem with dualism, then, was closely tied to his commitment to the darwinian philosophy of evolution, for that was the foundation for his personal views on biology and historical, cultural anthropology. Dewey's acceptance of that theory became the basis for his assertion that modern philosophy should abandon traditional dualisms.

Paradoxically, the philosophical problem of "rightful authority" is thus seen by Dewey to find solution in adherence to certain *findings* of science and the method of science, which in turn provide an answer to those problems that concern dualisms. Since he has connected "the things of ordinary experience" as well as "beliefs about values and purposes" (concerning the direction of conduct) to the question of dualisms, this has an important implication to his theory of morals and ethics. What does self-examination and the query, "How, then, shall I live?" have to do with dualisms? And shall we look to science for an authoritative answer? What did Dewey mean by 'dualism,' and which one(s) did he find particularly problematic? Is this actually an issue of science, as Dewey suggests, or is it more appropriately seen as a metaphysical position?

DEWEY'S NATURALISM

In some ways I think Dewey intended dualism to be considered as a sharp, discontinuous, unqualified demarcation between fields of experience, for example, the real and the apparent, the physical and the mental, being and being-in-process. These, and others, he saw as manifestations of the more far reaching dichotomy proposed between nature and experience itself. Dewey's opposition to dualism was rooted in his own commitment to naturalism which permits no breach in "historic, existential continuity."[10] In other words, our experience *is* nature, and nature has not been brought into existence by some outside force or creator. If the latter were so, he reasons, there would be a "breach" in the continuity of nature's experience, for, as something *made*, it would have had a beginning, and, perhaps, a destiny. The problem was deeper than a matter of inappropriate use of categories or the making of distinctions; it related to the nature of existence itself, and was therefore at the heart of Dewey's metaphysical conception and world-view. It explains why he was unwilling to make a distinction between science and a morality, existing apart from science, needed to adjudicate the process of science and its effects.

However, in his writings one can find an array of references to dualisms, albeit at perhaps a less extreme, unqualified level. The "pervasive quality" of a whole (e.g. a work of art, or a particular situation) is seen to stand apart from something lacking in the parts.[11] The process of reflection is distinguished from the physical "object" of reflection.[12] We find processes of management distinct from events managed and ensuing consequenc-

es,[13] time itself as separate from events in time,[14] individual existences with qualities are differentiated from generalizations in which qualities play no significant role,[15] and mind is seen to be something different from consciousness.[16] He says that we "cannot compare existence and meaning; they are disparate."[17] And in several places he separates "immediacy of existence", the ineffable, non-cognitive, awareness, and recognition, from that which is knowable, cognitive, and articulated.[18] His emphasis on the use of intelligence and art is contrasted with that which is unplanned and the product of "luck".[19] Also, as has been pointed out by R. Garrett, Dewey distinguishes "things possessed of" qualities from the qualities themselves possessed.[20]

In light of such passages, in which there appears to run through our ordinary experience a thread of division, it may seem strange that Dewey would take such concern over dualisms, *per se*. He was considered by some to be a pluralist[21], perhaps due to his emphasis on the unique quality (the pervasive quality[22]) to be found in each individual existence. But he asserted a common or over-lapping aspect to the historic-continuity of each particular, and in the sense that he sought to link all of the components of experience into a system which was closed to "outside intervention", in that sense, he appeared committed to a kind of monism.

DEWEY AND DARWIN

His rejection of dualism in the sense of a theistic explanation of origins, was supported, he contended, by the authoritative verification of science. "Only as science is seen to be fulfilled and brought to itself in intelligent management of historical processes in their continuity can man be envisaged as within nature, and not as a supernatural extrapolation."[23] However, as Dewey himself explains, "Truth or falsity depends upon what men find when they warily perform the experiment of observing reflective events,"[24] and it is required of science (in its humanizing service) that it be "intelligible, simple and clear; in order that it may have that correspondence with reality which true knowledge claims for itself."[25] It should be seen then, that science, unlike history, finds a kind of correspondence with reality in the demanding method of replicatable experiment, and that any theory of origins would go beyond the historic-time process to which we have scientific access. Therefore any explanation of existence based on verification by the scientific method would have an Anselmic ring which in some way assumed the truth of what it was trying to prove. So it is with Dewey's attack on dualism; he generalized the conclusions of darwinian-science (itself highly speculative) to demonstrate the veracity of a monistic (in the sense explained) world-view in which the supernatural was excluded and philosophy wedded to science.

In writings where his opposition to dualism was expressed, he often discussed not the arguments, but the *motives* of those who proposed some form of dualism. H. Reichenbach, in a manner similar to Dewey, expresses this approach.

> *The psychological motives for transcendentalism which both pragmatists and empirical realist reject derive from other sources. I think Dewey is quite right in pointing out that one of these sources is the quest for certainty in ethical decisions; another source is the desire to show human knowledge as a very imperfect instrument and to make men amenable to the doctrines of religion.*[26]

This is a common method used by Dewey; he often attributes psychological motives as the reasons behind the formulation of those theories with which he disagrees. In essence he "poisons the well"[27] through unverifiable and speculative attributions of motives, thus discounting what may well have been the conclusions of experience, observation, or logical reasoning. Much of the first chapter of *The Quest for Certainty* is devoted to the supposition that, because of peril and frustration, the awe-inspiring uncertainty in man's existence, a philosophy of certitude in which the intellect, because of its ability to grasp universal, unchanging truth, was deemed superior; while the practical and instrumental became "inferior". "Herein is the source of the fundamental dualism of human attention and regard. The distinction between the two attitude of everyday control and dependence on something superior was finally generalized intellectually."[28] Likewise, in "Time and Individuality", he describes the ravages of time "the destroyer" and oncoming death, as "the root of what is sometimes called the instinctive belief in immortality. Everything perishes in time but men are unable to believe that perishing is the last word." The grounds for belief, he says are human rather than metaphysical, and, though "couched in the technical language of philosophy", find their cause in "the heart's desire for surcease from change, struggle, and uncertainty. The eternal and immutable is the consummation of mortal man's quest for certainty."[29]

> *Thus he seeks to discount a rational or empirical basis for belief in eternal things, that is, a belief compatible with a dualistic world-view.*

He assumes an affective rather than an evidential base of support for such beliefs, discouraging evaluation of those ideas on the merits of their own logic and the validity of known reasons given in support.

A CASE FOR DUALISM

For example, the Greeks' emphasis on intellect and contemplation surely stemmed in part from their *observed* distinction of man from animal. Their differentiation of the real and apparent is an expression of our own experience that the "real" is that which is approachable, which will stand the scrutiny of a second look.[30] Plato's picture of "human life as a pilgrimage from appearance to reality"[31] would certainly seem to relate to our own experienced process of maturation and the unfolding of self-acceptance and understanding. And there is also interest and hope in change, for time can develop, build, heal, and transform, as well as destroy. In change we find anticipation and challenge, for men often seek and long for *meaning* far more than certitude. So much depends on what is happening and on the likelihood of one's expectations. I am only trying to illustrate that Dewey's method of discounting certain beliefs on the basis of assumed causal motives may be incorrect; the very examples he uses can be interpreted differently. It is a discouragement to inquiry when we fail to evaluate a theory (even those with dualistic leanings) on the basis of its own merits. In spite of the likelihood that I may be accused of taking the same tack, I would like for a few moments to explore Dewey's own commitment to what I have called monism. Since part of it is in his own words and well-documented trends in his own writing, I trust the conclusions drawn will be tolerably justified.

Dewey, early in his career, was linked decidedly to Hegel's system of thought. Hegel was an idealist philosopher who also developed a form of monism in which reality was seen to be a progressing, teleological and historical system; the complete system "does not correspond to reality, it is reality—the one reality, the one subject."[32] The true is the whole, and there is one thinking "substance" or subject.[33] Dewey was attracted to the unification supplied in Hegel's philosophy, both intellectually and emotionally. Divisions and separations, which he attributed to his cultural heritage seemed "an inward laceration" to him and he felt "oppressed" and repelled by "way of isolation of self from the world, of soul from body, of nature from God" such that "Hegel's synthesis of subject and object, matter and spirit, the divine and the human, was, however, no mere intellectual formula; it operated as an immense release, a liberation."[34] Though he drifted from an all out commitment to Hegel's thought, he wrote of the lasting impression it had made on him, [35] and there are aspects of his thought that maintained a hegelian tone. If Hegel had said that all there is, is mind; Dewey seemed to say that all there is, is nature, the *natural* is the whole. If for Hegel, everything is God; for Dewey, nothing is. Hegel sought to systemize a kind of pantheism; Dewey, atheism. Hegel emphasized history, but a peculiar kind of history, one which possessed a kind of inevitability[36] which perhaps allowed a sort of appearance of human agency and cooperation, but in which human freedom was lost in the inexorable flow. Dewey emphasized science, but a particular kind of science which is adamantly based on classical darwinian evolution, in which intelligence itself is said to have emerged from natural, unassisted processes; and though he stresses the potentiality of the intelligent use of human freedom, he does call his theory a kind of Behaviorism[37a], albeit one in which the field of stimuli is widened to include factors not always found in the laboratory.

DEWEY'S NATURALIST SCHEMA

Dewey's abhorrence of dualism and early commitment to Hegel, carried an idealism which was not completely antagonistic to theology; at one point he considered intelligence to be the key to theological understanding.[37b] It was his later acceptance of Darwinism as a full-blown generalization of existence that became a justification for the biologically organic unity of the world. This was a basis or "schema" for his subsequent naturalism, a commitment to viewing human and nonhuman united such that all human behavior was seen to take place in a "cultural matrix" which was a kind of pragmatic answer to the absolute mind of Hegel.[38] Thus he embraced the most damaging of dualisms proposed by the language of our culture, that of "natural" vs. "supernatural." By accepting the former, his philosophy became one which would exclude (in name but not in practice) universals from morality, and in discounting the latter, his works became in some sense an apologetic (in a polemical way) for naturalism with a foundation in evolutionary science philosophy and a "theology" of man which excluded God.

CULTURAL KNOWLEDGE AS TRUTH

Was he, as suggested of other philosophers in his essay, "Philosophy and Civilization," caught in the movement of history, so touched by "local time and place" that they cannot transcend them to gain access to eternal truth?[39] Is his philosophy to be viewed as largely a cultural product of his era, exemplifying one of his own tenets, that the individual "cannot so transcend his social limitations as to become a prophet for future generations. . ."[40]? In light of the assurance with which he wrote, it seems unlikely that Dewey would have thought so, concerning his own philosophy. The view seems fallacious on several counts. First, by assigning such an all-encompassing power to one's immediate culture rather than to the strength of logic and evidential truth supporting their assertions, this becomes simply another way of discounting or poisoning the well of what they have to say. Second, the view itself, that we are culture-bound, is a dogma which asserts universal application. By attempting to universalize the philosophic experience (in claiming that culture cannot be 'transcended') it seeks to transcend, while at the same time discounting the attempts of earlier thinkers to formulate thoughts with clear and applicable truth-value for us.[41] Third, the assertion that we are culture-bound discounts our own capacity to deal with issues about reality and truth, so that our beliefs and theories became more of an indication of the age in which we live, than of our recognition of what *is*. This, in effect, isolates us from a community of truth-seekers through the age and seeks to dispel hope of finding truth outside our cultural setting; but it also alleviates one ostensibly of any responsibility to truth which is universally applicable. Fourth, to assert that we can draw meaning, but not truth (of course, that is an assertion of truth) from previous generations, ensconcing their words in a cultural matrix which permits us to interpret their conclusions on the basis of cultural bias and motive, that assertion fails to recognize our own intellectual experience that we can have real, logical, adjudicative access to the thoughts and arguments of past thinkers, and that such access is based on the remarkable interfertility of human minds. In that sense of human interfertile rationality we are peers, in present, with those who have spoken before us; we could talk and reason with them, for words have an enduring quality which can be examined in their own right, and if we are to think for ourselves, and encourage children to do the same, we must not only find personal meaning in the words of others but also examine the truth of what they have said. It is not enough to claim, as Dewey did, that variant philosophies, having missed or denied the "truth" of the universe's dominant character of contingency, left "the reflecting mind without a clew," putting "subsequent philosophising at the mercy of temperament, interest and local surroundings."[42] Culture can surely be seen as a factor, especially in defining actual problems that come to one's attention. And it is through reflective thought and critical inquiry that we seek to transcend temporal habits of thought and impulsive response. Our real and practical access to the individual minds of past generations and other, contemporaneous cultures, manifests a significant and distinctive cleavage between man and animal. And in the end, it will be our assertions of truth about specific premises (e.g. assumptions regarding the precise nature and meaning of a particular view of the universe's contingency) that must be evidentially examined and interpreted. Dewey seemed to discount the reasoning of others as culturally controlled, on the basis that he had recognized the truth which enabled him to speak in a way transcending his own "temperament, interest and local surroundings."[43] His particular view of contingency followed, I believe, from his own logical extension of a darwinian/hegelian universe which was seen to be in process of creating itself. In that sense there is an irrational lure which tones his thought. However, for the reasons outlined above, whatever "intellectual entitlement"[44] he felt warranted his conclusions, should be examined on the basis of the arguments themselves, and not simply on the fact that his intellectual foundations were laid in the late 19th and early 20th centuries. In other words, was what he said verifiable? Does it make sense? Does it follow? Was he right? And in pragmatic vein, what would be the consequences of trusting that approach to science to create new traditional values, having permitted it to destroy the old?[45]

DEMOCRACY AS RELIGION?

Now, having revealed my reasons for believing that neither Dewey nor we should consider him or us to be simply "caught in the movement of history", let us return to the development of his own intellectual journey to monistic naturalism. After receiving his doctorate in philosophy from Johns Hopkins in 1884, he spent most of the next ten years teaching at the University of

Michigan. He had been raised in an atmosphere of Congregational Calvinism, and in Ann Arbor continued his involvement in protestant Congregationalism and was active in the University's Student Christian Association.[46] But he moved to the University of Chicago in 1894, nearing the age of thirty-five; perhaps influenced by his growing commitment to Darwinism and naturalism as a world-view, he disassociated himself from church involvement from that time. Science had become a major theme for him as the approved method of philosophy, and he became increasingly opposed to the dichotomies "between God and man and between the natural and the supernatural."[47] The absolute form of God was incorporated into humanity, and the mental form of spirit into the material content of nature.[48] He committed himself to the idea of a spiritualized society in which individual character and redemption would be realized through recognition of the societal spirit and the embracing by institutions, of Christian virtues.[49] Since the solution to people's problems lay in society and not God as heretofore conceived, the democratic political system was the best for promoting a religious commonwealth in which the social relations encouraged by Jesus could be realized.[50] "Democracy would foster redemption, and individuals in a democracy expressed New Testament values in political life, thus advancing the social order."[51] Dewey, in this sense, equated religion and democratic culture and called for a reconstruction of the church in democratic and social values; he saw the church dissolving into society in a sacrificial merging with other social institutions.[52] For Dewey, "the democratic social order re-formed Christianity and was, when rightly understood, self-correcting." Thus, religion was replaced and a politically concerned sociology put into its place.[53] This emphasis on change and re-formation in which *nothing* from the past (e.g. religious truth and morals) would be brought forward as an authentic and relevant form and end-in-itself, was consistent with his commitment to evolutionary metaphysics.[54] Science, then, would be seen as the means of securing control of both nature and moral experience, through an intelligent examination of the past with an eye to future consequences. In *A Common Faith*, written about forty years after his move to the University of Chicago, Dewey identified himself with those who think "the advance of culture and science has completely discredited the supernatural and with it all religions that were allied with belief in it."[55] He thus reaffirmed what he had already asserted, the "increased knowledge of nature which has made supranature incredible, or at least difficult of belief."[56] However, related statements in *A Common Faith* were much more set. He asserted there, that science is ill disposed to belief in the supernatural,[57] that dependence on the supernatural actually retards efforts at social progress,[58] and that a conception of the "religious" is best seen as separate from the supernatural.[59] "The point to be grasped," he concluded, "is that, unless one gives up the whole struggle as hopeless, one has to choose between alternatives. One alternative is dependence upon the supernatural; the other, the use of natural agencies."[60] This faith in mankind and intelligence "has always been implicitly the common faith of mankind. It remains to make it explicit and militant."[61]

Dewey began by denying the dualism of the natural and supernatural and between man and God; by bringing God into nature, he effectively de-personalized his concept of the creator and offered a neo-hegelian concept of God manifesting and creating himself in an imperceptibly purposeful but teleological progression. He ended by reasserting the natural-supernatural dualism but only to discredit the supernatural, as a discredit and hindrance to the use of man's intelligence. It is this dualism that I think is the most damaging, for it in essence draws a circle around all there is and leaves God out, assuming his non-existence or irrelevance, or that trust in him would have an enervating effect. But key to Dewey, is not just that he made assertions which can be interpreted as atheistic in a practical, if not actual, sense. It is that he went beyond philosophy, *per se*, and appealed to the authority of science as a means of grounding the truth of those assertions. Thus, anyone who questioned the meaning or truth of his conclusions would need to examine the scientific arguments on which he based his claims.

CHALLENGING DEWEY'S SCIENCE

We might ask, is there anything inherent or obvious about our observation of or experience in nature, that would lead one to the conclusion that God does not exist? Many thinkers, given either a cursory or a careful examination of nature's intricacies, from either end of the spectrum, have been led to an opposite conclusion. So how is it that one feels justified in claiming that science, inspired by darwinian speculation, has now shown . . . ? Surely someone has taken a wrong turn, but suffice it to say, though we will not examine it in this paper, the origin of this conflict and the development of the major prem-

ises on both side goes back long before Darwin and before the split in western time. I would like to examine, however, events closer to our time and seek to relate them to our present discussion.

If we are to examine our experience at all, we are forced in some degree to trust our own self-conscious awareness and reflective capacities. Descartes[62] (whose dualism was a major target of pragmatists), William James[63], himself a pragmatist, and Dewey[64] all emphasized our conscious experience of reflection in finding a footing, as it were, from which to pursue further inquiry. Awareness of and a certain kind of trust in our own thinking (our capacity for reason and intelligence) would seem to be a fundamental aspect of our own experience; there appears, on the face of it, to be a distinct differentiation between that which we are conscious of and consciousness itself.

In many ways Descartes' goal seems to have been similar to Dewey's, that of *control*.[65] He felt that if he could make the basic distinctions available to him, he could thereby provide a basis of inquiry which would allow him to control nature, thus empowering man to a greater realization of his own inherent capacities. Indeed, it may be this fundamental realization of a differentiation between man and nature which led to much of what has been termed scientific progress. Dewey's concern was that objects should not be "isolated from the experience through which they are reached and in which they function. . ."[66] and so he was in opposition to the method of Descartes; but apparently many of those scientists on whose work the scientific revolution was based, had an understanding of themselves as students of nature that enabled them to uncover significant and culture changing applications from the things they learned, in spite of (or because of) their dualism.

I. Barbour asks the question, "Why was it in Western civilization alone, among all the cultures of the world, that science in its modern sense developed? Many historians contend that one important factor was the tacit attitude toward nature engendered by the unique combination of Greek and biblical ideas."[67] He cites the convictions that nature is intelligible, that it can be known (only through) observation, and that man is not to worship nature (hence, not being an object of worship it could thus "become an object of study") as important factors which led to the development of modern science.[68] He contrasts, through quotes by Whitehead and Cohen, the implications for science found in western, Judeo-Christian religion in which God is seen as a rational, personal, lawgiver and creator, with that of Asian conceptions of God as "a being who was either too arbitrary or too impersonal for such ideas to have much effect on instinctive habits of mind."[69] Lacking the idea of a rational creator, they were unable to accept the idea that we, as rational beings in that image, would be able to meaningfully "decipher the laws of nature (in Galileo's phrase, we might read the mathematical language of the Book of nature) . . ."[70] Barbour also cites the ideas affirmed by Newton and other Puritans that "the study of nature, the divine handiwork, redounds to God's glory," and the impact of the Reformation ideas of Luther and Calvin in dissolving the distinctions between "religious and secular" on the basis of God's Lordship in all of life, including the pursuit of scientific truth about nature and the practical benefits to mankind which might come from such study.[71] "It thus appears, " he concludes, "that both the biblical doctrine of creation and the vocational ethic of Puritanism contributed positively to the rise of science."[72]

It would seem then that the evidence of history supports the assertion that the scientific impact of those generations of thinkers was enhanced rather than obstructed by their understanding of a certain kind of dualism, one which did not exclude God from creation, or from relevance to their personal lives. They, as any philosopher-scientist who has been looking into the book of nature, had confidence in their assumption that they could read it with accuracy, for they reasonably counted on the existence of unchanging laws governing relationships between the things they observed. The Newtonian world they viewed still supports the major theory of application to problems involving practical and macrophysical projects. It has not been superseded in the exhaustive sense that Dewey implies. And though Einsteinian physics has much theoretical and philosophical application, especially in micro- and sub-atomic physics, the indeterminancy that emerges from quantum theory may (1) say as much about us and our inability to measure certain things instrumentally, as it does about ultimate reality, and (2) become the kernel of a part-whole mistake when applied inappropriately to the meaning of our personal lives.

Regarding the laws which govern the patterns in nature, Dewey had a somewhat ambivalent view. He wondered at the materialist's dependence of "the fixed and unchanging . . . laws of matter." For, he says, "fixed laws which govern change and fixed ends toward which changes tend are both the products of a backward look, one that ignores the forward movement of life."[73]

It has been reserved for our century, he contends, "to give birth to the out-and-out assertion in systematic form that reality *is* process, and that laws as well as things develop in the processes of unceasing change."[74] However, in the same essay, he also says, "The indeterminate is not change in the sense of violation of law, for laws state probable correlations of change and these probabilities exist no matter what the source of change may be."[75a] On one hand he does not seem to be questioning our understanding of these laws, such that we realize a mistake or an inaccuracy which necessitates a more complete or comprehensive wording of our description of a law we thought we already knew. Rather he seems to assert that our present accurate understanding and description of physical laws will change because the laws themselves will change. On the other hand, he seems to contradict that conclusion when he says that the probabilities on which present laws are based "exist no matter what the source of change may be." Let us remember that Dewey is trying to build a case for the world-view that our universe has a dominant characteristic of contingency, but a contingency which itself is always in the process of flux and change, such that nothing is brought forward in terms of a consistent and reliable identity, and that all existence (including rules, laws, principles, and morals) is being reformed through an evolutionary process. Nature is seen as experience in process, and dualism is disavowed since it (dualism) would posit an existence "outside" of nature. He supports this thesis on the basis of darwinian conclusions and generalizations. However, his ambivalence concerning the changing of the laws of nature is perhaps understandable upon consideration of two further points.

First, let it be recalled that the theory of evolution depends incontrovertibly upon the presuppositions of uniformitarianism, which states that what we now observe is the result of present processes extrapolated back to distant aeons. Fixed, static rates of decay, by which the "clocks" used to date the hypothesized age of items, are calibrated on the basis of uniformitarian assumptions. In other words the rate of decay for certain radioactive substances used in dating is assumed to have remained the same, the relative abundance of the elements in relation to the dating process is assumed to have remained the same, and it is assumed that the substances used in dating have not themselves been contaminated through leaching or the introduction of additional material from the outside. Thus, ultimate reliance on the truth of evolution as a justificative support for a philosophical system depends on the existence of fixed and predictive laws of nature.

And secondly, Dewey emphasizes that nature in process is characterized by "*organization* with all which is implied thereby."[75b] He admits that this is a problem of factual inquiry. "Under exactly what conditions does organization occur, and just what are its various modes and their consequence? We may not be able to answer these questions satisfactorily."[76] He assures us in the same passage that this is not a matter of "philosophical mystery" and he clearly discounts any attempt to introduce a dualism as evidence "of a special force or entity called life or soul." He denies that denial could ever be based on empirical evidence, but his recognition that organization is "so characteristic of the nature of some events in their sequential linkages,"[77] coupled with an understanding of the Law of Entropy (Second Law of Thermodynamics), would lead to a denial that organization of such specific linkages and sequences could ever have occurred by fortuitous processes. Is not our own experience often witness to the fact that the parts necessary for an organized, integrated, functioning, and harmonious whole, do not just come together? Also, undirected energy entering a system will always destroy existing patterns. In order for organization to come about and be maintained, something (like consciousness or DNA) has to already be available to use the incoming energy in helpful ways.[78] Reference to entropy also helps to explain the overall process of slowing down (decay) which is evident in our universe. It would explain why it is unlikely that the rates of radioactive decay have remained constant, anymore than the rate of growth from conception to adult could be seen as constant. The law of entropy hints at a basic discontinuity, for in its governing of organization it maintains a gap between what we ourselves perceive to be patterned in intricate ways and that which is chaotic and helter-skelter.

A CASE FOR DUALISM AGAIN

In light of the fact that modern science emerged in an atmosphere which was supportive of a certain kind of dualistic world-view, and the additional fact that certain laws of science seem incompatible with foundational presuppositions of evolution, it would seem that there is no justifiable scientific (empirically evidenced) support for the abandoning of dualism altogether. The problem is not the doing away with traditional

distinctions, but in recognizing which are legitimate and supportable and which are not. I have suggested that the most damaging of all dualisms is that purported distinction between the natural and the supernatural *when* it is related to the division of the secular from religious, and *when* it lends itself to separating the relevance and realization of God's involvement in all of life. The assertion that life can be sufficiently explained in naturalistic terms does not seem to follow from the verifiable facts and observations of nature, and thus it would seem to represent a truncated view of reality, for it assumes the naturalism (atheism) it purports to prove. A typical passage is found from J. Rachels:

> *So long as people had no other way of explaining why the world is as it is, the grip of religious conceptions was powerful: everyone, scientists included, had reason to believe. But after Darwin, with teleological conceptions banished from our understanding of nature, there is markedly less work for religion to do, and God looks more and more like an unnecessary hypothesis.*[79]

Such is the word of authority from science; the word with which Dewey concurs. However, the banishing of teleological conceptions is based on the assumption of God's lack of involvement, which lack of involvement it is supposed to prove. Also, depending on what one understands by teleological, its discounting is certainly not a foregone conclusion. The idea of design was touched upon in our paragraph on organization; entropy and Aristotle notwithstanding, much of nature seems to be purposive and possessed of a biological phenotypic destiny as directed by the germ plasm. And I can guarantee you that future events are definitely at work in the bringing of this paper together. I think so much depends on a person's presuppositions (the "pervasive quality" of their outlook?). But I also feel that Rachels reveals a shallow understanding of peoples' relationship to God and the reasons and evidence brought to bear in support of such a relationship. And of course the question is not what we seem to need, or what represents the minimum requirement for a possible explanation; the question in this case is, what is true, what can be verified by evidence, especially when it comes to a metaphysical and transcendental theory, which, though claiming to be scientific is neither falsifiable nor empirically replicatable; in fact, the components of this theory cannot be comprehensively observed (currently observed patterns of adaptation and variation fit consistently into theories which support theistic dualism). Again, we are examining the scientific justification for the exclusion of philosophical dualism as a world-view. We are looking to see if such an exclusion makes sense based on the known facts of science. It is an important issue, for it relates ultimately to our view of morality, ethical behavior, and what it means to be a person.

THE LIMITS OF SCIENCE

In monistic naturalism (in which nature is seen to be all there is) it is assumed that something foundational (like atoms and molecules), in an unbroken line of continuity, eventually bridged the gap into self-consciousness. Such an assumption does not agree with our own experience in that things do indeed reproduce in kind and that the integrity of genetic material in a reproducing organism does not otherwise allow for significant, cross-kind, verifiable transition. Nor does spontaneous generation occur; life itself comes from life. However, Dewey conjectures that, according to his concept of continuity, "rational operations *grow out* of organic activities, without being identical with that from which they emerge. There is an adjustment of means to consequences in the activities of living creatures, even though not directed by deliberate purpose."[80] He asserts that human beings come to make those adjustments purposely in the natural process of living, so that "Conceptions derived from a mystical faculty of *intuition* or anything that is so occult as not to be open to public inspection and verification (such as the purely psychical for example) are excluded."[81] Dewey here is not, I think, talking about the emergence of consciousness or a self within only a single person; that is, he does not simply refer to the organic progression following the conception of a human person as the DNA of sperm and ovum unite and begin the definitive movement to personhood and consciousness within the individual; that could be seen as emerging from within the already given process; he refers to the historical assumptions of the theory that, aeons back, consciousness itself came about through non-deliberative, non-purposeful factors, such that intelligence, reason, and personality all arose fortuitously from the non-personal, unreasoning, unintelligent forces of nature. In the case of the individual developing person, though we cannot observe the actual molecular processes, we are able to perceive and measure many of the indicators from conception, to the advent of brain waves, to the beginning of self-consciousness,

and on. Whatever the mystery of personhood, it happens, so far as we can tell, as a result of that union and the resulting processes and structures. But the conjectured emergence in evolutionary terms of thought from non-thought is not open to the public inspection and verification desired by Dewey (and science). Hence, the insistence that no supernatural agency (God) was involved is a dualistic move which has the effect of leaving God out as a factor in his own universe. Again, the proof of the conclusion is assumed in the premise, for a serious study of nature in scientific terms is not conclusive enough to warrant an evidential exclusion of the supernatural, in fact, many would consider the opposite to be true. And one significant aspect of this controversy is the illustration that, just as religion once spoke with unwarranted dogmatism concerning certain scientific issues about which religious authorities may have had little experience, so now it behooves science to recognize the limitations of its powers of explanation and verification. Science, though enabling man to control much of his world in a finite sense, has also become the means of his possible destruction. Using science to shape moral and social experience and thus to guide conduct, though a goal of Dewey's, has not met the felt needs of human experience. It has not worked, for science will, by virtue of its power and the nature of morality itself, always need to be undergirded by values of virtue that transcend the immediate environment and history of the individual. (Of course, any theory based on genetic or historic generalities would have to assert the possibility of such transcendence in the assertion that its *own* explanations were an accurate and universal description of how things actually developed.) The problem is not his dependence on transcendence, but on *which* system to believe or commit to.

I am asserting that dependence on an unverifiable theory which neglects the veracity and urgency of moral absolutes of virtue as revealed in the least of our own expectations and experience (e.g. the need for and expectation of honest; mutual respect of persons); this neglect has progeric consequences and discourages man because it is a repudiation of what he actually finds himself to be, something far different from the animal, not only because of this intelligence and thinking power, differences that Dewey recognizes and affirms,[82] but also because of his (man's) moral imperatives which find no match in the animal world.

DEMOCRACY AS TRANSCENDENT IDEAL

One ideal that Dewey did hold as an absolute was his commitment to democracy as a transcendent ideal. He viewed democracy to be "not an alternative to other principles of associated life" but as "the idea of community life itself." He continued,

> *It is an ideal in the only intelligible sense of an ideal; namely, the tendency and movement of some thing which exists carried to its final limit, viewed as complete, perfected.*[83]

In democracy he was seeking the possibility of a system in which "nature itself, as that is uncovered and understood by our best contemporaneous knowledge" would "sustain and support our democratic hopes and aspirations. . ."[84] He wanted something "not contradicted by what science authorizes us to say about the structure of the world."[85] Something real, "(that is to say the world of existence accessible to verifiable inquiry) so that we may essay our deepest political and social problems with a conviction that they are to a reasonable extent sanctioned and sustained by the nature of things."[86] He felt that democracy was compatible with a world in which there was real uncertainty and contingency, for then the democratic process of inquiry would be able to use the community in the solving of problems. Democracy is seen as a haven from inappropriate control and an abusive system of authority; it was a way, for him, of seeing the world as a place in which equality is not characterized by a fixed order of species, grades or degrees, for each existence would be considered unique and irreplacable in its own right.[87]

I include this section because it seems, that in a sense Dewey viewed democracy to be a characteristic and ideal expression of experience in nature, thus it was part of his rejection of dualism to see existence as democratic, without an absolute or divine presence from which we might infer *a priori* rules of behavior. It seems an extreme demand, for we need not see all of life as contingent to see that some it is; we need not consider all rules to be fixed, in order to see that some of them are. Dewey seemed to assume that the method of democracy (like, he felt, the method of science) would always be benign, growth beneficial, and science always motivated to the betterment of mankind. "Growth itself is the only moral 'end,'" he stated.[88] And growth, and the betterment of mankind's condition could best be achieved through the having of problems and the

consequent process of problem solving through democratic, reflective inquiry.

He felt that science and the method of science could take over the moral development of mankind in a way that supplanted man's dependence on moral absolutes. As late as 1948, after two world wars, he wrote a new introduction to *Reconstruction in Philosophy*, and continued to assert,

> *The supposed fact that morals demand immutable, extratemporal principles, standards, norms, ends, as the only assured protection against moral chaos can, however no longer appeal to natural science for its support, nor expect to justify by science its exemption of morals (in practice and in theory) from consideration of time and place—that is, from processes of change.*[89]

In the text he had stated, "When the consciousness of science is fully impregnated with the consciousness of human value, the greatest dualism which now weighs humanity down, the split between the material, the mechanical, the scientific and the moral and ideal will be destroyed."[90] But certainly the majority of those who have supported the importance (and the existence) of absolute or universal ethical truths *never* looked to science for support or justification. For those values would apply to the scientist as well as the non-scientist. And humanity is not being weighed down by a split in thought as much as in its own inappropriate and sometimes immoral applications of the very tools of science themselves. The problem is not science, for science depends on the universal ethical truth of honestly and integrity of reporting its finds, and on some degree of altruistic desire for its applications and discoveries to be used for the benefit of others. Barbour points out that "Seven out of ten members of the Royal Society were Puritans—a ratio far out of proportion to the population as a whole; most of the virtuosi were active churchmen, and many of the clergy encouraged or themselves took part in scientific pursuits."[91] The foundation for the rise of modern science as a major focus of human endeavor was laid by those who did not look to science to teach them morals, but who brought their commitment to universal moral truth with them to the study of science. And the misuse of science today stems not from a perpetuation of dualism but from a lack of moral commitment on the part of its practitioners, stemming in part from a lack of recognition of, and adherence to, values that must be brought *to* the scientific process itself.

IS SCIENCE BASED ON MORALITY?

Dewey displayed an understanding of this himself, when in an early essay he said, "The system of science (employing the term 'science' to mean an organized intellectual content) is absolutely dependent for logical worth upon a moral interest: the sincere aim to judge truly."[92] A certain kind of diligence and care in one's work, and the honesty to accurately record and report it, are values upon which scientific and medical endeavor is dependent. In similar fashion, the democratic process presupposes, especially as Dewey see it, certain attitudes of good-will, benevolence, and cooperation, and values such as the worth of each individual person and honesty in the voting process, in order to work.

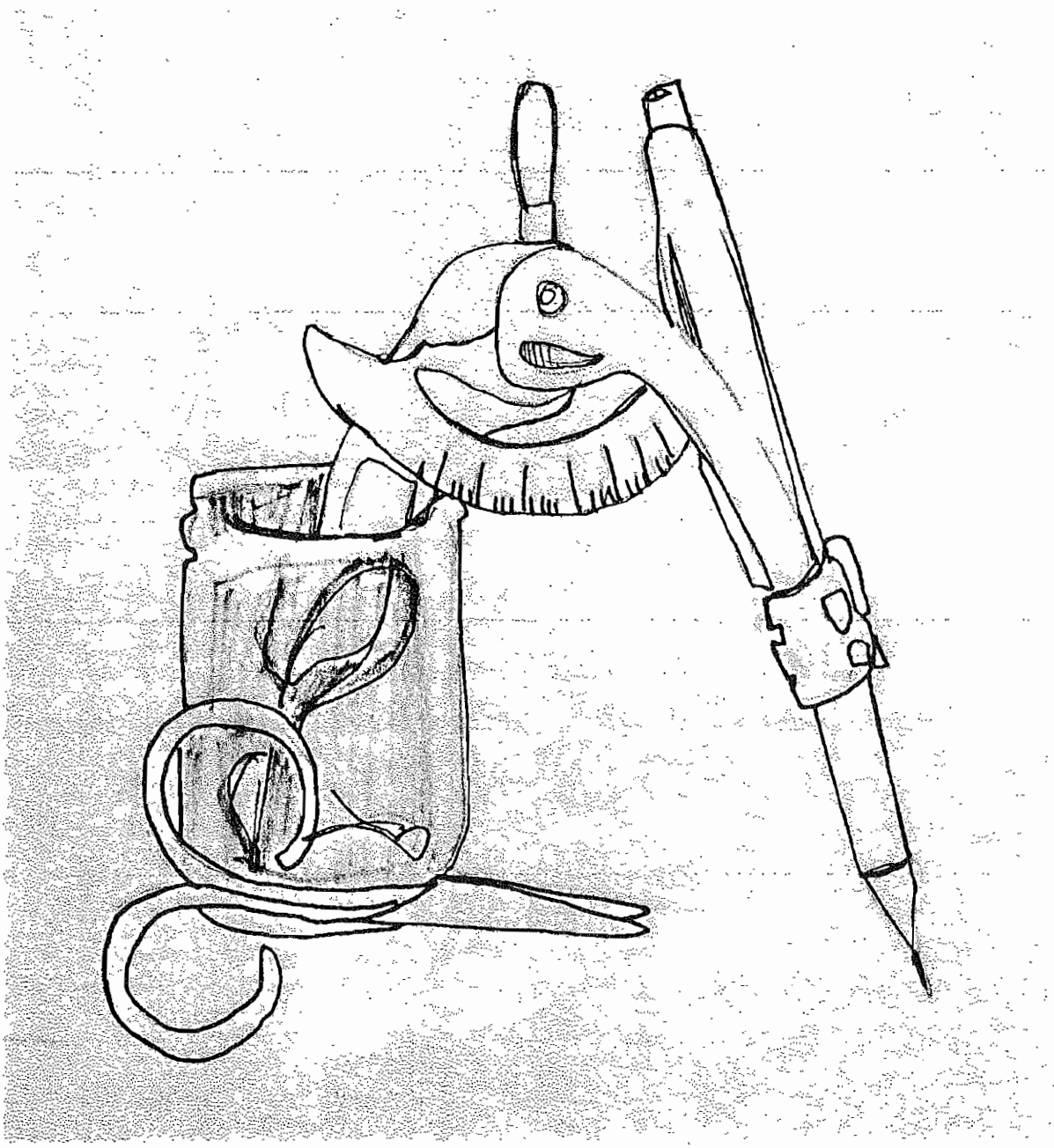
Growth, as moral value, must also be qualified by growth in a certain direction. Dewey qualified as growth, that which would increase capacity for further growth. Growth which would permit health, harmony and wholeness. And it seems that our experience has often been that such growth is inevitably the outcome of a proper application of universal principles and rules of moral excellence. Lying, hatred, bitterness, cheating, impurity, greed—these diminish one's capacity. Truth-telling, forgiveness, honesty, fidelity, generosity—expand; they work because they are good. The road to moral excellence is, perhaps like the road to musical excellence, through a small gate. Only through the small gate of precise and disciplined moves can the musician enter the ever expanding and deepening freedom that comes with mastery of one's instrument. The stringent and purposeful training and strengthening of fingers and lips enables the bringing together of skills to form an integrated and unified piece in which the freedom and individuality of the artist are made possible only because of the disciplined submission required by the absolute nature of the instrument and of music itself. Even so, those who enter through the small gate of conformity in behavior to the specific and demanding excellencies of virtue, can avoid the diffusion and weakened purpose of those who pursue shifting virtues in an attempt to expedite consequences in a world which won't sit still. Dewey perhaps felt that the concept of a moral authority outside of and higher than man himself, suggested the presence of absolutes which to him, would seem a kind of static trap in a contingent world. Perhaps, however, it is the contingent world with its unexpected and unforeseen circumstances and temptations, that forms the necessary backdrop against which moral virtue could be measured and developed.

Perhaps we cannot hope to understand our situation, without reference to our moral judgements. Our moral principles, like coordinates, help us to define our position.

IN SEARCH OF MORAL STANDARDS

In his commitment to naturalism, Dewey, like J. Bentham, was unable to affirm such absolute moral standards which would stand apart from and precede the consequences of moral choice. In that sense, the standard by which he judged goodness was "essentially utilitarian . . . in that is calls for a judgment based upon a reflective consideration of the consequences, both favorable and unfavorable, of a projected line of conduct."[93] Dewey valued those judgments which generated "no after-taste of bitterness", enjoyments which "are not to be repented of. . ."[94] But he saw this happening in a "flexible" moral order in which,

> *A moral law, like a law in physics, is not something to swear by and stick to at all hazards; it is a formula of the way to respond when speci-*



fied conditions present themselves. Its soundness and pertinence are tested by what happens when it is acted upon.[95]

On the other hand, he had to assert a basic commonality and uniformity of basic human needs and the "conditions which must be met in order that any form of human association may be maintained. . ."[96] Because of the uniformity of these needs and the necessity of certain conditions, he concluded,

In consequence of these two factors of comparative invariance, the extreme statements sometimes made about the relativity of morals cannot be maintained.

And S. Hook, writing in support of Dewey's position, parries the objections of those who would extend that position to the use of intelligence in simply shrewd or personally expedient fashion; he says,

Occasionally it is asserted that survival is the truly ultimate value which in cases of moral conflict always has an overriding validity. Reflective human behavior does not always square with the assertion. Sometimes the worst thing we can know of a human being is that he survived under the conditions laid down for survival—that he torture and destroy the innocent, betray friends, cause and country.[98]

Thus we arrive back to the common human experience that, when push comes to shove, when an ultimate issue is on the line, we run up against moral standards that do not change and to which we turn in such situations. The situation is a little like one described by D. Sayers, an English novelist. In one of her books she includes a conversation which is particularly appropriate, considering the dilemma at hand. It seems the police superintendent was questioning a reluctant old fisherman, in pursuit of information relevant to a recent crime. At one point the superintendent asks,

"Was anybody with you in the boat?"
"No, there weren't"
"Then what was that grandson of yours doing?"
"Oh, him? He was with me. I thought you meant was there somebody else, that didn't ought to have been there."
"What do you mean by that?"[99]

I would assert that, despite his denial to the contrary, Dewey has someone in the boat with him, and that someone relates in some way to absolute standards of moral virtue. But his unwillingness to affirm that sets the condition in which it is difficult to avoid in moral judgment a kind of compromise, indeed a sort of calculation of expediency. It is a compromise between conflicting interests which often characterizes the legislative process; and though the essence of some alternatives may lend itself to an appropriate compromise, some choices motivated by economic and moral compromise can become an expedient which in the end weakens humanitarian impulses and leads to "incalculable consequences in cruelty and oppression."[100]

In his rejection of dualism and commitment to a naturalistic world-view, Dewey in effect sought to banish God from a meaningful role in the understanding of our experience. He appeals to science for support, but an examination of the theory in question shows it to be lacking the empirical verification and consistency necessary to justify adherence to its conclusions. Neither the known facts nor the operable and observable laws of science will support it to the extreme degree in which it is usually presented. And when the generalization of this theory is extrapolated into the realm of human behavior as "proof" that absolute rules or principles of morality are passe, we find it to be in contradiction to both the historical evidence of past generations and to the desirable needs of our own experience. Dewey, in getting rid "of the useless lumber that blocks our highways of thought" has thrown out the very pieces we needed by which to begin and "make straight and open the paths that lead to the future."[101]

SUMMARY

Dewey's stress on intelligent reflection in the process of valuation, and the use of critical inquiry in examining one's assertions, makes his theory useful to a point and challenging to the mind, but his insistence on naturalism as a theoretical and practical position leaves no room for an ultimate justification of many acts which concern legitimate moral decision and thus leads to a lack of moral vigor and a resulting discouragement of the spirit.

NOTES

1. John Dewey in *The Philosophy of John Dewey*, P.A. Schilpp, ed. (New York, 1939), p. 524.
2. John Dewey, *The Quest for Certainty* (New York, 1929), p. 256.
3. *The Philosophy of John Dewey* (Schilpp, ed.), pp. 523-524.
4. *Ibid.*, p. 524.
5. *Ibid.*
6. *The Quest for Certainty*, p. 219.
7. *The Philosophy of John Dewey*, p. 524.
8. *Ibid.*, p. 525.
9. *Ibid.*, p. 524.
10. John Dewey, *Experience and Nature* (New York, 1929)., p. 266.
11. John Dewey, "Qualitative Thought" in *Philosophy and Civilization* (Gloucester, Mass., 1931), p. 98.
12. *Experience and Nature*, pp. 10,15.
13. *Ibid.*, p. 159.
14. *Ibid.*, p. 97.
15. John Dewey, "Time and Individuality" in *On Experience, Nature, and Freedom* (Indianapolis, 1960), p. 232-233.
16. *Experience and Nature*, p. 303.
17. John Dewey, "Philosophy and Civilization" in *Philosophy and Civilization* (Gloucester, Mass., 1931), p. 6.
18. *Experience and Nature,* pp. 85, 304, 328.
19. *Ibid.*, pp. 363, 372.
20. Roland Garrett, "Dewey's Struggle with the Ineffable" in *Transactions of the Charles S. Peirce Society*, IX (1973), p. 100.
21. *The Philosophy of John Dewey*, p. 36.
22. *Ibid.*, p. 545.
23. *Experience and Nature*, p. 163.
24. *Ibid.*, p. 31.
25. *Ibid.*, p. 164.
26. Hans Reichenbach, "Dewey's Theory of Science" in *The Philosophy of John Dewey*, P.A. Schilpp, ed. (New York, 1939), p. 173.
27. S. Morris Engel, *With Good Reason: An Introduction to Informal Fallacies* (New York, 1990), pp. 195-197.
28. *The Quest for Certainty*, p. 13.
29. "Time and Individuality" in *On Experience, Nature . . .*, p. 225.
30. Michael Novak, *Belief and Unbelief* (New York, 1965), pp. 119-122.
31. Iris Murdoch, *The Fire and the Sun: Why Plato Banished the Artists* (London, 1977), p. 2.
32. Antony Flew, *A Dictionary of Philosophy* (New York, 1979), p. 140.
33. *Experience and Nature,* p. 231-233.
34. John Dewey, "From Absolutism to Experimentalism" in *Contemporary American Philosophy*, Vol. II, G P. Adams and Wm. P. Montague, eds. (New York, 1962), p. 19.
35. *Ibid.*, p. 21.
36. Isaiah Berlin, *Historical Inevitability* (London, 1954), p. 10.

37a. *The Philosophy of John Dewey*, p. 555.

37b. Morton G. White, *The Origin of Dewey's Instrumentalism*, (New York, 1964), pp. 97, 150.

38. Ibid., p. 150.
39. *Philosophy and Civilization*, pp. 8-9.
40. Edwin W. Patterson, "Pragmatism as a Philosophy of Law" in *The Philosopher of the Common Man* (New York, 1968), p. 196.
41. John Dewey Seminar, Dr. R. Garrett, instr. Montclair St. College, (Spring, 1992).
42. *Experience and Nature,* pp. 46-47.
43. *Ibid.*
44. *Contemporary American Philosophy*, Vol. II, p. 19.
45. John Dewey, *Freedom and Culture* (New York, 1939), p. 154.
46. Bruce Kuklick, *Churchmen and Philosophers: From Jonathan Edwards to John Dewey* (New Haven, 1985), pp. 230, 241.
47. *Ibid.*, p. 233.
48. *Ibid.*, p. 237.
49. *Ibid.*, p. 244.
50. *Ibid.*, p. 243.
51. *Ibid.*
52. *Ibid.*, p. 244.
53. *Ibid.*
54. *Ibid.*
55. John Dewey, *A Common Faith* (New Haven, 1934), p. 1.
56. John Dewey, *Characters and Events*, Vol. II, J. Ratner, ed. (New Yrok, 1970), p. 515.
57. *A Common Faith*, pp. 38-39.
58. *Ibid.*, p. 76.
59. *Ibid.*, pp. 1-3, 66.
60. *Ibid.*, p. 81.
61. *Ibid.*, p. 87.
62. Rene Descartes, *Discourse on Method and Meditations on First Philosophy,* D. A. Cress, trans. (Indianapolis, 1980), pp. 63, 67.
63. William James, "The Sentiment of Rationality" in *Essays in Pragmatism*, A. Castell, ed. (New York, 1966), pp. 3-5.
64. *Experience and Nature*, pp. 13, 15, 67-68.
65. *Meditations on First Philosophy*, pp. 57, 84; Experience and Nature, pp. 10-11, 13, 70.
66. *Experience and Nature*, p. 11.
67. Ian G. Barbour, *Issues in Science and Religion* (New York, 1966), p. 46.
68. *Ibid.*, p. 46-47.
69. *Ibid.*, p. 46.
70. *Ibid.*, p. 48.
71. *Ibid.*, pp. 48-49.
72. *Ibid.*, p. 50.
73. "Time and Individuality" in *On Experience, Nature . . .*, p. 228.
74. "Time and Individuality" in *On Experience, Nature . . .*, p. 229.

75a. *Ibid.*, pp. 239-240.
75b. *Experience and Nature*, p. 255.
76. *Ibid.*
77. *Ibid.*
78. Michael Pitman, Adam and Evolution: *A Scientific Critique of Neo-Darwinism* (Grand Rapids, Michigan, 1984), p. 232.
79. James Rachels, *Created From Animals: The Moral Implications of Darwinism* (Oxford, 1991), p. 127.
80. John Dewey, *Logic: The Theory of Inquiry* (New York, 1938), p. 19.
81. *Ibid.*
82. *Experience and Nature*, pp. 185, 258, 294, 368.
83. John Dewey, *The Public and Its Problems* (New York, 1927), p. 148.
84. John Dewey, "Philosophy and Democracy" (1918) in *Characters and Events* Vol. II, J. Ratner, ed. (New York, 1970), p. 849
85. *Ibid.*
86. *Ibid.*
87. *Ibid.*, p. 854.
88. John Dewey, *Reconstruction in Philosophy* (Boston, 1948), p. 177.
89. *Ibid.*, p. xiii.
90. *Ibid.*, p. 173.
91. *Issues in Science and Religion*, p. 48.
92. John Dewey, "Logical Conditions of a Scientific Treatment of Morality" (1903) in *John Dewey on Education: Selected Writings*, R.D. Archambault, ed. (Chicago, 1964), p. 39.
93. "Pragmatism as a Philosophy of Law", p. 202.
94. *The Quest for Certainty*, p. 267.
95. *Ibid.*, p. 278.
96. John Dewey, "Anthropology and Ethics" (1927) quoted in J. Rachels, "John Dewey and the Truth about Ethics" in *New Studies in the Philosophy of John Dewey*, S. M. Cahn, ed. (Hanover, New Hampshire, 1977), pp. 167-168.
97. *Ibid.*
98. Sidney Hook, *Philosophy and Public Policy* (Carbondale, Illinois, 1980), pp. 169, 171.
99. Dorthy L. Sayers, *Have His Carcase* (New York, 1932), p. 135.
100. "Pragmatism as a Philosophy of Law", pp. 203-204.
101. *Contemporary American Philosophy*, p. 26 (This is from Dewey's essay, "From Absolutism to Experimentalism".)

SOURCES BY JOHN DEWEY

(1903) "Logical Conditions of a Scientific Treatment of Morality" in *John Dewey on Education: Selected Writings*, R.D. Archambault, ed. (Chicago: The University of Chicago Press), 1964, pp. 23-60.
(1908) "Religion and Our Schools" in *Characters and Events*, Vol. II, J. Ratner, ed. (New York: Octagon Books), 1970, pp. 504-516.
(1918) "Philosophy and Democracy" in *Characters and Events*, Vol. II, J. Ratner, ed. (New York: Octagon Books), 1970, pp. 841-855.
(1927) *The Public and Its Problems* (New York: Henry Holt and Company), Reprinted by Ohio University Press (Swallow Press), Athens, Ohio.
(1927) "Anthropology and Ethics" quoted in J. Rachels, "John Dewey and the Truth about Ethics" in New Studies in *The Philosophy of John Dewey*, S. M. Cahn, ed. (Hanover, New Hampshire: The University Press of New England), 1977, pp. 149-171.
(1929) *Experience and Nature*, 2nd Ed. (New York: Dover Publications, Inc.).
(1929) *The Quest for Certainty*. (New York: Perigee Books).
(1930) "From Absolutism to Experimentalism" in *Contemporary American Philosophy: Personal Statements*, Vol. II, G.P. Adams and Wm. P. Montague, eds. (New York: Russell and Russell, Inc.), 1962, pp. 11-27.
(1931) *Philosophy and Civilizaton.* (Gloucester, Mass.: Peter Smith), 1968.
(1934) *A Common Faith* (New Haven: Yale University Press).
(1938) *Logic: The Theory of Inquiry* (New York: Holt, Rinehart and Winston).
(1939) *Freedom and Culture* (New York: Capricorn Books).
(1939) "Experience Knowledge and Value: A Rejoinder" in *The Philosophy of John Dewey*, P. A. Schilpp, ed. (New York: Tudor Publishing Company), pp. 515-608.
(1940) "Time and Individuality" in *On Experience, Nature, and Freedom*, R. J. Bernstein, ed. (Indianapolis: The Bobbs-Merrill Company, Inc.), pp. 224-243.
(1948) *Reconstruction in Philosophy* (Boston: Beacon Press).

OTHER SOURCES

Barbour, I. G. (1966). *Issues in Science and Religion*. New York: Harper & Row, Publishers).
Berlin. I. (1954). *Historical Inevitability*. London: Oxford University Press.
Descartes. R. (1641). *Meditations on First Philosophy in Discourse on Method and Meditiations on First Philosophy*, D. A. Cress, trans. (Indianapolis: Hackett Publishing Company), 1980. pp. 43-100.
Engel. S. M. (1990). *With Good Reason: An Introduction to Informal Fallacies.* New York: St. Martin's Press.
Flew. A. (1979). *A Dictionary of Philosophy,* 2nd Ed. New York: St. Martin's Press.
Garrett. R. (1973). "Dewey's Struggle with the Ineffable" in *Transactions of the Charles S. Peirce Society,* IX. pp. 95-109.
Hook. S. (1980). *Philosophy and Public Policy.* Carbondale, Illinois: South Illinois University Press.

James. W. (1879). *Essays in Pragmatism.* A. Castell, ed. New York: Hafner Publishing Company. 1966. pp. 3-11.

Kuklick. B. (1985). *Churchmen and Philosophers: From Jonathan Edwards to John Dewey.* New Haven: Yale University Press.

Murdoch. I. (1977). *The Fire and the Sun: Why Plato Banished the Artists.* London: Oxford University Press.

Novak. M. (1965). *Belief and Unbelief: A Philosophy of Self-Knowledge.* New York: New American Library.

Patterson. E. W. (1968). "Pragmatism as a Philosophy of Law" in *The Philosopher of the Common Man: Essays in Honor of John Dewey to Celebrate His Eightieth Birthday.* New York: Greenwood Press, Pub. pp. 172-204.

Pitman. M. (1984). *Adam and Evolution: A Scientific Critique of Neo-Darwinism.* Grand Rapids, Michigan: Baker Book House.

Rachels. J. (1990). *Created from Animals: The Moral Implications of Darwinism.* Oxford: Oxford University Press.

Reichenbach. H. (1939). "Dewey's Theory of Science" in *The Philosophy of John Dewey,* P. A. Schilpp, ed. New York: Tudor Publishing Company, pp. 157-192.

Sayers. D. L. (1932). *Have His Carcase.* New York: Harper and Row, Pub.

White. M. G. (1964). *The Origin of Dewey's Instrumentalism.* New York: Octagon Books, Inc.

Address correspondence to:
Terry Allen
40 Oakwood Ave.
N. Haledon, NJ 07508
USA