1953

John Dewey's Philosophy of Education in Relation to Inquiry as Method and Process

Mary Dolores Schorsch

Loyola University Chicago

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JOHN DWEBY'S PHILOSOPHY OF EDUCATION

IN RELATION TO INQUIRY AS

METHOD AND PROCESS

by

Sister M. Delores Schorsch, O. S. B.

A Thesis Submitted to the Faculty of the Graduate School

of Loyola University in Partial Fulfillment of

the Requirements for the Degree of

Doctor of Education

June 10

1953
VITA

Sister M. Dolores Schorah, O.S.B., was born in Morris, Illinois. After achieving at De Paul University the degrees of Bachelor of Arts, Master of Arts, and Bachelor of Science, she joined the Benedictine Sisters of Chicago. Later she completed further graduate studies at Fordham University and at De Paul University.

For a score of years she was active as supervisor and secretary in her Community and for two years as principal of Saint Scholastica Academy. After A Course in Religion for the Elementary Schools, composed by her and her priest brother, was accepted by the Archdiocese of Chicago School Board in 1931 for publication and adoption, she was placed by the President of De Paul University on the faculty. Eventually she conducted graduate courses in education and took part in the direction of master's theses and in the final oral examinations. Several times she was guest lecturer at Catholic institutions of higher learning.

The Course in Religion is a research project to make religion the dominating and unifying factor of educational growth by integrating it with liturgy, history, geography, literature, art, music, and character formation. The classroom technique was constructed for the realization of the course objectives, being expounded in twelve pamphlets and in articles. To exemplify the teaching of the Course, Sister Dolores conducted institutes and held demonstrations in the United States and Canada. On the religious education of the preschool child she read papers for the National Conferences on Family Life and for parent teacher associations.
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CHAPTER I

INTRODUCTION

Topic of Investigation

More cursory reading of John Dewey's writings reveals the central nature of inquiry in his philosophic and educational theories. No book or article or address is without reference to the importance of inquiry or without the treatment of a feature of it. The inquiry is central in his philosophic and educational ideas not only as a method for obtaining knowledge but also as the source—from its peculiar nature—of the opinions or doctrines themselves. He himself has made inquiry the foundation of logic as the title of his book reveals and he connects his psychological ideas with inquiry. Inquiry as a process supplies him with his leading philosophic ideas. It is his theory of knowledge. According to Piatt, "Dewey's philosophy begins and ends in logical theory as the method of inquiry," and his "metaphysics is a development of his logical theory." Inquiry also has a central position

4 Donald A. Piatt, "Dewey's Logical Theory," Philosophy of John
in Dewey's theory of education as growth. 5

Because of the position of inquiry in Dewey's philosophic and educational thinking it seems of value to examine his leading ideas in philosophy of education in relation to inquiry and to subject the leading ideas so examined to a critical review in relation to scholastic and Catholic principles.

Treatment of the Topic

In studying the leading philosophical and educational elements in Dewey's philosophy of education from the viewpoint of his scientific inquiry, the first demand is an exposition of the origin, nature, and value of the scientific inquiry. Since he insists in his writings that the inquiry must proceed operationally or experimentally, the operational characteristic of the inquiry is particularly scrutinized. Having analyzed his inquiry, the investigation attempts to find out what relationship his scientific inquiry has to his theory of logic, of psychology, of reality, and of education.

In regard to logical theory several questions require answers. What function in inquiry does Dewey give to judgment, proposition, substance? What meaning does he attach to the principles of identity, contradiction, and causality? The examination of Dewey's logical theory will end with the question of the relationship of scientific inquiry to the theory of knowledge.

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*Dewey, ed. Schilpp, 109, 107.*

In reviewing Dewey's psychology several questions present themselves. What place in his inquiry have the operations of perception, emotion, volition, thought, reasoning, and inference? What does he say about the nature of these conscious operations? How does he define learning? What theory of psychology does he follow?

Since Dewey states that during the rise of inquiry the associations of men became social, it is necessary to set forth what he says about: the relationship between the inquiry and the social; the dependence of the moral on inquiry and human association; democracy as the ideal society; the most acceptable form of authority for a democratic society; the desirability of a democratic world organization.

Inquiry which is reflective thinking originated in the interaction of the organism with the environment in the effort of adapting itself to the environment, the potential environment being the entire world. Consequently, inquiry as a process involves certain ideas about the organism and the world. This step of the research deals with the nature of the organism and the world.

In regard to educational theory the study concerns itself with the place Dewey gives in education to inquiry and to the social which is directly involved in the inquiry as a process. This analysis necessarily involves the.

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7 Ibid., 18-19, 23-34.
8 Ibid., 33.
review of his ideas about aims of education, learning, methods, subject matter. The future of the school, according to Dewey's thinking, is also pertinent.

The last problem is the comparison of Dewey's principal philosophic and educational ideas with the natural ideas of scholastic philosophy and the supernatural ideas of Catholic belief. Particular attention is given to the question of whether these philosophic or supernatural ideas are empirical and experiential in Dewey's meaning of these terms and of whether they are imposed from without.

Sources of Information

Since Dewey has to his credit a great many books and an almost endless flow of articles, he himself can reveal his opinions in philosophy and education. While his innumerable articles appeared in a large variety of journals, a great many of them can be studied in collections. Dewey appears as the author of nine such collections. *Influence of Darwin on Philosophy*, 1910, was the first one to be published; it contains twelve articles by him. The *School and Society*, in its second edition of 1915, includes the three lectures of the first edition delivered in 1899 and six essays from the *Elementary School Record*. *Essays in Experimental Logic*, 1916, has, in addition to three essays which had appeared in Dewey's Symposium of *Studies in Logical Theory*, nine of his articles from philosophic journals. *Reconstruction in Philosophy*, 1970, consists of Dewey's lectures at the Imperial University of Japan, outlines of which had been printed in the *Journal of*
Philosophy. Dewey's three essays in Art and Education, 1929, appeared first
in the Journal of the Barnes Foundation, 1925 and 1926. In Individualism Old
and New, 1930, much of the material had appeared in the New Republic. Philoso-
phy and Civilization, issued in 1931, includes seventeen articles by Dewey.
Of Problems of Men, 1946, one essay had appeared about 1894 and the remainder
between 1935 and 1945. Of Knowing and the Known, 1949, composed by Dewey and
Bentley, all chapters except the last had been published as articles in jour-
nals between 1944 and 1949.

Joseph Ratner, an enthusiastic disciple of Dewey, edited a selection
of Dewey's articles in two volumes under the title of Characters and Events,
1929. He also edited two books comprising selections from Dewey's articles
and books. One was published in 1928 as The Philosophy of John Dewey, and the
other in 1939 under the title of Intelligence in the Modern World.

Only in three fields of philosophy has Dewey developed his ideas as
a system of thought: Logic, Ethics in its general principles, and Art. In
the first his ideas are formulated in Logic, the Theory of Inquiry; in the
second they are found in Ethics, the part written by him; and in the third
they are developed in Art As Experience.

His Reconstruction in Philosophy merely argues what the character-
istics of a philosophy should be. Philosophy has a social function and is
not absolute knowledge, reflects social changes in all fields including
religion, believes that nature can be controlled through science in relation
to human needs and social evolution, includes the concept of the adjustment
of the organism to the environment by means of inquiry, deals with ideals as
suggestions of something to be done and a way of doing, requires a logic which develops inquiry for the purpose of reconstructing experience, discovers through scientific inquiry morals which exist when something is to be done, rejects first and fixed ends and holds to the end of growing, examines social problems through inquiry in a social manner for the purpose of endless change of ideas and of environment. Dewey's Theory of Valuation, 1939, contains his theory of values. A Common Faith rejects the existence of an immortal human soul, and of a personal God, and of Christianity in general. Art As Experience, 1934, deals with his theory of art and appreciation. The Quest for Certainty contains among other things some of his psychological ideas. Knowing and the Known, 1919, attempts to determine the meaning of terms in his philosophy and lists postulations which are so formulated as to exclude opinions regarded as untenable by him.

Discussions of educational matters occur quite generally in Dewey's writings. But the most important books in educational theory are: Democracy and Education, 1916; How We Think, revised edition, 1933; Experience and Education, 1938. The first book has in view, at least in its practical application, kindergarten and the lower elementary grades, while the second envisages the upper elementary grades and high school. The third book was written by Dewey to correct misunderstandings of his first book, but it has reference in some respects to the entire field of education.

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10 Dewey, Experience and Education.
Many of Dewey's books deal professedly with philosophic problems. According to Dewey himself for many years Democracy and Education was the book in which his philosophy was "most fully expanded."\(^\text{11}\)


In reviewing from the standpoint of scholastic philosophy and Catholic belief the leading elements of Dewey's philosophic and educational thinking in their relationship to his inquiry as a method and process some basic and recent works are used as authorities. These include writings of St. Thomas Aquinas, papal encyclicals, and works of prominent present-day Catholic experts.

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CHAPTER II

SOME PREVIOUS STUDIES ON DEWEY

Numerous theses, books, and articles have been published about John Dewey. The first article seems to have appeared in 1898; it was a report on his laboratory school at the University of Chicago. The first dissertation was written in 1901 at the University of Halle-Wittenberg, Germany; its subject was Dewey's theory of interest and its application to teaching. From among the studies available eight were selected for review because of their bearing upon the present investigation. They fall into two categories, each with four studies. Those of the first category do not include a comparison of Dewey's ideas with scholastic and Catholic principles, while those of the second include such a comparison. The former do not reveal consensus, while the latter do.

A. Four Investigations Without Consensus

1. The Philosophy of John Dewey

In 1901 E. T. Feldman published his study, The Philosophy of John

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Dewey, reviewing critically Dewey's philosophy, 3 he found that its central principle is the organismic logic, formulated by Dewey while he was still an adherent of Hegelianism, 4 which "treats of experience in its absolute totality, not setting up some one aspect of it to account for the whole, . . . nor yet attempting to determine its nature from something outside of and beyond itself." 5

According to Dewey, an inquiry starts from primary or crude experience when a problem appears; it continues with the formulation of an hypothesis or an idea involving operations to be performed for the purpose of verifying it; it ends in the experience through which the ideas are verified. Reflective thinking is the temporal link between the initial and final experiences. It implies manipulation of things with hands and feet and apparatus, this being as much a part of thinking as the brain. The outcome of the inquiry or of reflective thinking is knowledge which includes the discovery of alternative options of change. 6

Reflective thinking can be understood just as anything else only in relation to its evolutionary genesis; it arose in the organism as a natural response for adjustment to the environment. Thinking, therefore, cannot be for its own purposes but must be for the purposes of the organism. Hence,

4 Ibid., 3-4.
6 Feldman, Philosophy of John Dewey, 39, 34.
philosophic thinking is not justifiable except for solving the practical problems of concrete living, and scientific objects are defined similarly in relation to their use.\(^7\)

Intelligence is not an outside power but a method of adjustment of capacities and conditions. During inquiry it discovers alternative options of change and can introduce novelties into the world, it, however, being the greatest of novelties. The world is in a process of transformation. In a fixed world there would be no reason for reflective thinking.\(^8\)

An experience is the interaction between the entire organism and the environment. Interaction consists of the qualities of color, taste, fear, pleasure, pain. These qualities are both in the environment and in the organism. An experience includes consciousness and the events called selves; but consciousness is unnecessary to experience. Every experienced situation is so unique that all generalizations are provisional and subject to continued verification.\(^9\)

At first, according to Feldman, Dewey regarded metaphysical speculation in pragmatism to be a self-contradiction, but later he admitted its validity. Dewey found something obdurate and self-sufficient in each existent. An existent is an event, matter being a characteristic of events. Everything that exists is associated as well as single. Knowledge has to do with existents as associated. The future is indeterminate and the past

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\(^7\) Ibid., 10-13, 76-77.

\(^8\) Ibid., 21-30.

\(^9\) Ibid., 15, 17, 18.
For Dewey, continuity is axiomatic; it unifies things and seems to be the relational. Mechanistic and spiritualistic metaphysics, the setting of the knower against the world as its spectator, the split between science and morals, and every other type of dualism violate continuity. Philosophy should be concerned with classifying ideas about morals, exploring how science could be put to human uses. In a way philosophy is a branch of morals, originating out of social and emotional situations. Morality is connected with values, and we naturally think in values. Science is the outgrowth of moral endeavor.

Feldman has some criticisms of Dewey. He rejects Dewey's statement that objects have no meaning apart from human use; for scientific objects need not be defined in relation to their human use, intelligence going beyond providing for the organism. Against Dewey he holds that things can be known in isolation and that there are mental representations—of future plans, for example. In his opinion Dewey breaks his principle of continuity in admitting levels of characteristics and existents. Dewey adopts philosophical positions or attitudes which to some extent are incongruous; as a consequence, it is impossible to know unambiguously and unequivocally where he takes his stand. Thus Dewey tries to embrace "continuity" and "creative novelty," which are evidently in mutual opposition. Also he is an "immediate empiricist," when

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10 Ibid., 50-9, 10-11, 78, 12, 27, 3b-3c.
11 Ibid., 5b-5d.
12 Ibid., 91-92, 94, 93.
He is occupied with the rich and diverse qualities present in non-reflective experience in order to discover reality and knowledge in their foundation; and he is an "objective empiricist" when he finds that reflective experience reveals a world altogether different from that of immediate or non-reflective experience. He cannot admit both realms of knowledge, that of immediate experience and that of reflective experience, because of his bias against dualism.  

Feldman's criticism of Dewey for rejecting theoretical science does not seem to be justified. Dewey does accept science in its theoretic aspect apart from its human use or before it has been turned into human use, but as such he claims science is of little value to the layman and to education.  

2. An Intellectual Portrait


An idea, according to Dewey, is a plan of physical action of the body and other bodies and things in relation to a problem directed to something to be done and something expected from doing. It is a mode of response and a public action. Ideas are validated through observable consequences.

13 Ibid., 113-119.

14 Dewey, Democracy and Education, 256-257.

and not through antecedent certainties of self-evident truths. If there were self-evident truths, scientific knowledge would not be genuine knowledge and the acquisition of new knowledge through reflective thinking would be a mystery.16

When an idea as a plan of physical action in inquiry is at work, it is a meaning. Things attain meaning when during the inquiry they are means to consequences or are consequences to which the means must be discovered. Only ideas or meanings are true or false. Since an idea is true because of the verifications of its consequences in an inquiry, there are no immediately true propositions.17

In the field of logic, then, which was his primary interest for more than forty years, Dewey presents his most fundamental contributions to philosophy and his basic doctrine, the subject matter of any controlled inquiry acquires logical properties. Hook believes that no one ever thought about this before Dewey. Thus the norms of valid implication and inference, standards, and leading principles are verified in their operations toward the successful outcome of inquiries. There is no guarantee that these principles will give us sound and fruitful inquiries in the future.18

In Dewey's opinion, Hook goes on, a truly unified human person is one whose entire body functions in all its parts to produce the moving equilibrium of health and whose life is integrated with the persons and

16 Ibid., 95-99.
17 Ibid., 61-63, 73, 76, 79-83.
institutions of his own social environment. The whole business of politics, economics, morals, and education is the construction of an environment which will produce sound and whole human beings who themselves will continue a sound human environment. 19

As a human being, man is a psycho-physical-social being. Out of psycho-social behavior originate meanings, moral intent, and personal qualities. Almost all the qualities of man as a human being develop socially. Society forms man through habit, emotion, and thought. Habits arise socially through controls by family, community, and state. An emotion includes a response toward another human being and extends beyond the body to personal social relations. Thinking is social behavior involving speech. Methods of testing meanings and the methods of communicating them are social. 20

The stimulus is related to the activity of the whole organism with its habits. The reaction is a change in the existing pattern of behavior. This pattern depends as much on the existing pattern of the organism's behavior as its quality does upon the quality of the stimulus. In regard to thought, the stimuli are the aspects of the environment determined by ideas as plans of actions, expressing meanings socially derived. 21

The subject matter of the scientific ethical inquiry consists of the evaluation of an act of value through its consequences in relation to the needs and interests of the situation which called it forth. Values

19 Ibid., 125-126.
20 Ibid., 118-122.
21 Ibid., 122-124.
develop out of impulses, desires, and interests, but they are not constituted by them. There is a stopping point in resolving moral problems through inquiry just as there is in scientific verification "when a certain set of observations is regarded as sufficient to determine a solution of the problem at hand." 22

In the social order there are conflicts between classes, races, institutions, and nations. While there is no real opposition between the individual and society, conflicts do arise with the need of an authority to settle them. Dewey proposes for the State the authority of the scientific method. Only in a democratic society without class distinctions is the widest use of scientifically organized intelligence possible. A social policy should be scientifically tested by those who are affected by the results of the test, sharing in producing and evaluating the results. 23

Political democracy cannot last in general economic want. Nor is it compatible with a capitalistic economy in which men and materials are systematically wasted, production and consumption are restricted, and scientific discoveries are used exclusively for profit and for war. Consequently, the basic instruments of production must be socialized so that the experimental method might be used in the widest way for social policies and all individuals might have effective freedom to carry on socially productive and creative activities, their freedom being supported by the very structure of

22 Ibid., 134-136.
23 Ibid., 145-156.
the economic organization. 24

There should be continuous planning through the scientific method for preserving and extending cultural liberties, for producing plenty, for determining the degree of specialization and decentralization in industry, for sorting out the relationship between private and cooperative farming, for evolving the mechanics of democratic control so as to prevent bureaucratic abuse of power. 25

Dewey heartily sympathized with most of the reforms proposed by socialism, but he was against its ideology and method. Since it is not certain whether the overlords of American industry and financial life will forego the use of force to resist economic reforms democratically brought about, "the majority," thinks Hoxk, "must safeguard itself against being taken unawares, and organize its power to a point where potential insurrectionists would be discouraged." 26 Every social policy is an hypothesis to be tested by deliberative democratic processes through observable consequences of the policy. Dewey has not worked out a plan of political action in regard to social and economic matters. 27

Dewey's philosophy of education can be understood only in terms of his philosophy. For him, education is in large measure the transmission of culture. Education should lead to a continued growth through experience with

24 Ibid., 156-157.
25 Ibid., 159-160.
26 Ibid., 170
27 Ibid., 161, 170-174.
the continuous aim of further growth, the present experiences leading to
future experiences. This growth involves the determination of the social
careers to which their growth fits the young people most effectively and
requires of society such an organization of its social institutions that these
careers become available to them. The present environment and relevant
sources of the past should provide the subject matter for learning through
pupil inquiry in the cooperative spirit and not by way of drill and skills.
Education must be so carried on that provision is made both for the present
needs of the child and for the needs of the community. It is not the province
of the school to change or rebuild society. However, educators must actively
oppose any restrictions of their own civic rights and the introduction of dog-
mas to determine the subject matter of instruction. 26

Dewey has written about aesthetic values. An aesthetic experience
is an objective interaction between man and his environment. It is based
upon rhythmic patterns of change and rest in both man and environment. A work
of art is something experienced as a work of formed matter, arousing a direct
perceptual experience of unique integration. The properties of a work of art
exist in the interaction of the observer and the work of art, the observer's
contribution being biological and social. The role of art is to establish
a continuity of culture. Objects of art, more than anything else, give us the
feeling that the past is right here before us. Art should be cultivated, for
it facilitates communication between different nations and groups, the art

being their universal mode of language. 29

In present day culture art does not play the role it should. Industry, producing for profit, is concerned about the beauty of its commodities only in so far as it pays. This emphasizes the hateful distinctions between the fine and useful arts. "Science seems to be foreign to the interests of modern art." 30 Dewey hopes that some day science and democracy "may bear the same relation—but—uncoerced—to the art of our time that religion and nationalism have borne to the arts of previous cultures." 31

Fundamental questions about the origin of the world are self-defeating because no statement can be made or inference drawn from observation to verify a hypothesis concerning the entire universe. Genuine problems are specific. 32

It is possible to feel dependence and humility in regard to cosmic forces "without surrendering to supernaturalism or to the simple negativism of village atheism." 33 If man seeks consolation amid the trials of life, it should be based on knowledge and not on myth. Dewey's way of being religious "is a faith that makes us sensitive to the common needs of our common lot and gives us the courage to strive continuously, not only for our own betterment

31 Ibid., 210.
32 Ibid., 211.
33 Ibid., 213-214.
but for that of our fellowmen." 34 He proposes the term "God" for the set of ideals that have been directive forces in our experience because he needs a term and because the use of the word has a history behind it. If there are any absolutes in Dewey's philosophy, "they are intelligence and democracy." 35 Dewey's cosmic outlook "recaptures the impressive quality of classic serenity at the same time as it retains the moderate feeling of activity." 36

Hook has given a comprehensive view of Dewey's philosophy, but his account of Dewey's educational theory is likely to give some erroneous impressions because of its brevity. Hook is not clear as to whether the schools have any part in bringing about social organization; yet Dewey emphasizes his belief that the schools should transmit only that part of culture worth transmitting and should improve the existing culture. 37 Generally Hook succeeds as he intends, and especially in regard to logical theory, in expressing Dewey's ideas in clear terms; but sometimes Dewey himself is clearer. It is an odd claim to say that Dewey was the first to note that controlled inquiry had logical qualities. Scholastic logic is built on what scholastics regard as inquiry. Naturally, if a person who accepted as inquiry only the scientific method were to undertake to write a logic he would have to base it on the scientific method.

34 Ibid., 218-220.
35 Ibid., 220.
36 Ibid., 221-222.
37 Ibid., 189; Dewey, Democracy and Education, 92, 369-370, 373-374, 386-387.
Hock follows Dewey in referring to opposing views in derogatory
terms: "the magic circle of private experience," "to seek consolation in
myth (supernaturalism)," overloids of American industry. He also has
appreciable expressions of his own: "village atheism," "a person of intelli-
gence and courage finds it difficult to accept supernaturalism." He seems
to be wrong about Dewey being sympathetic toward socialism. He holds that
there is a stopping point in solving moral problems through inquiry, just as
there is in scientific problems. Dewey does not agree with him that there
is a stopping point in verifying hypotheses.

3. The Appeal to Immediate Experience

Different from the preceding two studies is that of Hock made before
1943. He analyzes only Dewey's theory of knowledge.

Hock found the following points in Dewey's theory of knowledge.
Knowledge or its validity is connected with scientific inquiry. There is the
first immediate experience, also called primary, crude, macroscopic; the
reactions may be colors, sounds, also fears, and satisfactions. These reactions

39 Ibid., 170.
40 Ibid., 221.
are not knowledge nor are they objects of experience.\textsuperscript{44} The stages of inquiry are the following:\textsuperscript{45} (1) A problem having risen within it, the first immediate experience can become the starting point of an inquiry. (2) The solution of the problem having been undertaken, the immediate experience is analysed for the factors relevant to the problem—this is the first appeal to immediate experience. (3) After this on the basis of the factors related to the problem an hypothesis is conceived or constructed. (4) Then the hypothesis is tested by relating it to a new immediate experience—this is the second appeal to immediate experience. (5) The results of this trial may be used to refine and elaborate the hypothesis. (6) Through this refinement and elaboration of the hypothesis we get a new immediate experience—called consummatory experience. The tested hypothesis is knowledge. The consummatory experience may reveal a problem, in which case this experience may become the first immediate experience of a new inquiry.\textsuperscript{46}

When the hypothesis has stood the test it becomes the meaning of the factor or factors relevant to the problem for which the hypothesis was proposed. The object of knowledge, then, is the cooperation of an acculturated organism with the environment. It takes its start in the immediate experience as something formally possible.\textsuperscript{47}

\textsuperscript{44} Ibid., 51-54, 56-60, 63, 65.
\textsuperscript{45} Ibid., 52, 56-58, 60-62, 67, 68-69, 63.
\textsuperscript{46} Ibid., 59, 61-62, 64-65, 66.
\textsuperscript{47} Ibid., 56, 62, 64, 66.
The data of knowledge are habits, institutions, and beliefs, from which all knowing or effort to know starts. Every primary experience from which an inquiry begins contains already the results of reflective thinking or inquiry. Knowledge is never immediate. 48

Vack tries to express Dewey's theory of knowledge in simple language but he succeeds only in part. Also he fails to consider the social principle in Dewey's theory of knowledge; namely, that a tested hypothesis should be verified by others, its acceptance by others in continued inquiry being its ultimate verification. 49

h. Dewey's Philosophy and Educational Theory

Butler, in his *Four Philosophies*, 1951, gives an account of Dewey's pragmatism, theory of education, and reaction to religion. He adds a critical evaluation of it in regard to its strengths and weaknesses. 50

A precis of Butler's treatment of Dewey follows. In sense perception or experience we are doing things to the object and the object is doing things to us so that we "know" it. Experience is public and objective. Knowledge is experimental because it is an hypothesis which was verified "on

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48 Ibid., Ch. 63, 67.


the way of achieving a satisfactory out-working of a given unit of experience. 51

According to Butler, 52 in Creative Intelligence, 1917, Dewey claimed that pragmatism did not need any theory of reality in general. 53 However, in Experience and Nature of 1925 he said something about existence, 54 and in 1927 he wrote the preface to Hook's work, The Metaphysics of Pragmatism. 55 Also his follower, Child's, has several assumptions on existence. 56

Butler treats "Dewey's metaphysics" in ten propositions; 57 the first is attributed to Santayana without specific reference; the second has a quotation from Child's work. The ten points could have been evolved by any careful reading of Dewey. Seemingly the ten points are Butler's.

1. "The world is all foreground" with society as "the ongoing human stream in which significant events take place."

2. "The world is 'characterized throughout by process and change,' containing nothing, static, nothing outside life's changes.

51 Ibid., 426-427.
52 Ibid., 429-430.
54 John Dewey, Experience and Nature, Chicago, 1925.
57 Butler, Four Philosophies, 431-437.
3. "The world is precarious," change being unpredictable.
4. "The world is incomplete and indeterminate," improvements being possible through "the inventive powers of man."
5. "The world is pluralistic," the things not being closely united.
6. "The world has ends within its own process." Neither objectives nor values are ultimate.
7. "The world is not, does not include," a transspiritual reality. There is no unchanging substance, no unchanging relation, no God.
8. "Man is continuous with the world." He is a part of Nature, born both within and of Nature through evolution. Reason is "a phase of Nature."
9. "Man is not an active cause in the world." Yet man is capable of interacting with the world to change the direction of events. He has no free will.
10. "The world does not guarantee progress." It is indeterminate in respect to values, so man can apply his "redirecting power" for changes.

The pattern of logic is the experimental method, mediating between the technical inquiry in the laboratory and the common-sense inquiry outside of it. Logic is closely related both to culture and to the patterns of animal existence.58

Values have their existence through their relations with individual social activities. Before values can be experienced there must be language,

58 Ibid., 439, 443.
the achievement of selfhood, and environment. Two perspectives are involved
in the guiding principle of value: "the perspective of the present situation
in which a value selection is to be made and the perspective of possible
future situations to which the outworking of the present may lead." Value
is satisfactory rather to the situation than to the person involved in the
situation. 60

The basis for ethical values lies in the communication of selves
with other selves and with groups by means of language. The ethical value is
realized by acting in a way to resolve satisfactorily the indeterminate
elements of the present situation and to open the way to the most satisfactory
control of following situations. 61

Experiences of value have an aesthetic side to them because of their
beauty or their meanings which we desire to preserve. Aesthetic values exist
in the communication of selves with other selves and objects through language
or painting or sculpture or architecture or dramatic action or dance or
music. Religious value in pragmatism is the value of realizing values. 62

Values are rooted in the individual's social life process. The
human person communicates not with one society but with many of these: the
home, the school, the church, the industrial community, the labor union. To

59 Ibid., 116.
60 Ibid., 114-117.
61 Ibid., 117.
62 Ibid., 119, 153.
be a member of a social group a person must have a high regard for cooperation, self-denial and temperance, bravery and courage, kindness and love, generosity and loyalty. For society to thrive it must allow living space for the individuality of its members which implies allowing each one as an individual certain civil, religious, academic, and other freedoms, and sufficient leisure for play and recreation, balanced by the opportunity to work. 63

The end of education is more education. Education should give the learner experience in effective experiencing. Particularly the learner should learn to cope with the indeterminacies of experience. Social efficiency can be termed the general objective of education. Starting with the experience of the pupil himself as the indeterminacies of the experience indicate, learning should be carried on through the scientific method of inquiry. 64

In Dewey's opinion, analysis of religions reveals such a complexity of the bad and the good that no common religious elements can be arrived at. He is against the supernatural. Ideals or possible values grow out of present experience and provide the pattern for future experience. The relation of the ideal and the actual through which new values arise in experience is "God." 65

The strength of pragmatism, says Butler, is its counsel for us to

63 Ibid., 453-456.
64 Ibid., 462-466.
65 Ibid., 470, 472-473.
live through one experience at a time, to keep close to experience, to use experimentation for life's problems, and in education to use many of the principles of pragmatism. 66

Dewey's pragmatism, Suller holds, also has weaknesses. (1) It applies the experimental method arbitrarily to some situations. (2) Man does not seem to be able to solve all problems by himself. (3) Meanings seem to be more closely identified with objects and events than with operations. (4) In epistemology and social theory there is continuity but everywhere else there is multiplicity and discontinuity. (5) Man can hardly be recognized in pragmatism's representation of him. (6) Ontologically there is no attempt to give meaning to the word is. (7) The Individual—social life process is hardly a sufficient basis for value. (8) Pragmatic ethics is hardly adequate for life. It seems that moral value should be satisfactory to the ultimate requirements of selfhood. (9) Aesthetic value involves also other qualities besides beauty; it includes even negative aesthetic values, to which insufficient space has been given by Dewey. (10) Pupils are more than vocal social phenomena who have their selfhood only because of their give and take with society. While we become conscious of selfhood by communicating with other selves and objects, the existence and essence of selfhood are not constituted by this relation. (11) There are no words without meanings, and thoughts cannot be communicated without thinking selves. (12) In education the experimental method is applied too universally and arbitrarily. (13) The

66 Ibid., 476-477.
need for the use of the word "God" as Dewey defines it is evidence that
people have need for true religion with a supernatural base. "Our Meanings,"
says Butler, "should be made as clear as possible, and this cause is not
helped by using hallowed words with meanings which are antithetical to their
hallowed meanings." 67

Butler seems to base his account of Dewey's metaphysics on writers
about his philosophy, especially Child's. 68 Had he used Dewey's own works
he would have found many metaphysical ideas. Butler seemingly states that
experience is knowledge, 69 but according to Dewey it is so only after the
problem within it has been subjected to the scientific method with acceptable
verified results. 70 Butler could have made the account of the experimental
inquiry clearer. 71 He should have described how men in Dewey's philosophy
go about making changes in the environment. 72 On the whole his assessment
of pragmatism's strength and weakness is well done. 73

67 Ibid., 482.
68 Ibid., 129-130.
69 Ibid., 626.
70 Dewey, Quest for Certainty, 63-64, 96-100, 103-104, 122, 137,
167-168, 196; Democracy and Education, 317-323.
71 Butler, Four Philosophies, 126, 139-142.
72 Ibid., 133, 135-136.
73 Ibid., 176-182.
B. Four Investigations with Comparisons to the Catholic Position

The four preceding investigations concerned themselves largely with Dewey's philosophy, treating only briefly, if at all, his educational theory. All except Hook had criticisms, but only Butler based the criticisms to some extent on Christian principles. In contrast the next four studies compare the Dewey with the Catholic position, all the authors but the last one being Catholic.

5. The Limitations of the Educational Theory of John Dewey

James H. O'Hara published in 1929 *The Limitations of the Educational Theory of John Dewey*, in which he compares Dewey's philosophy of education with the Catholic position in philosophy and religion.74

O'Hara mentions the differences between Dewey's philosophical ideas and Catholic philosophical and theological doctrines: such as the existence of God; man's composite nature of body and soul; his soul's immortality; his theocentric life; his endowment of mental power; the existence of fixed principles for knowledge and for morals; the fact of original sin; the Church the mother of civilisation.75 He also indicates to a limited extent how far we can accept some of Dewey's ideas. For example, in regard to Dewey's principle of moral growth, a Catholic can say that there is ceaseless growing


75 Ibid., 26-28, 30-32, 38, 73, 14-15, 22-23, 26, 66, 68, 74.
toward God; in regard to the need for improving the social order he can agree.\textsuperscript{76} O’Hara goes along with many of Dewey’s educative principles and practices, although he finds most of them inordinate in statement.\textsuperscript{77}

O’Hara misunderstands Dewey in alleging that Dewey makes the intellect subordinate to sense; that he does not believe in contemplation in the sense of reflective thinking; that he makes morality consist in the cultivation of a few virtues; that he fails to recognize the need of self-control; that he makes all men equal; that he in desiring that education deal with the child’s present excludes the future; that he is a disciple of Rousseau.\textsuperscript{78} O’Hara criticizes Dewey for extending the scientific inquiry to philosophy.\textsuperscript{79} While it is true that Dewey’s inquiry is not the sole method of investigation, still as he explains it, the inquiry can be used in philosophy and theology. Also O’Hara misunderstands what Dewey means by religion.\textsuperscript{80} This is not surprising, since Dewey’s A Common Faith, which contains his ideas about religion and God appeared five years after O’Hara’s study.\textsuperscript{81}

\textsuperscript{76} Ibid., 37, 21.
\textsuperscript{77} Ibid., 18-19, 42, 47, 102-105.
\textsuperscript{78} Ibid., 15, 33, 19-30, 30-39, 77, 33.
\textsuperscript{79} Ibid., 18.
\textsuperscript{80} Ibid., 31.
6. John Dewey and the New Education

With materials published before 1932 Sister Joseph Mary Baby wrote *A Critical Study of the New Education*. She treats of the operation of the new schools, their historical origin, their evaluation, and the applicability of their principles to Catholic schools. To Dewey she devotes about fourteen pages, and she refers to him now and then in other parts of her book.

She describes Dewey's educational ideas in relation to the school he had started at the University of Chicago in 1896. He began with no ready-made principles, but with questions which led to five principles: making the school an embryonic society with a home environment; starting by arousing the interest of the child toward his active growth; leading the child to take possession of the social culture through self-activity and as a member of the group; advancing from his present experience toward the subject matter of the curriculum; bringing about his moral training through social participation. By 1902 Dewey had put these principles into practice. When he left Chicago for Columbia University in 1904, he had sketched out, according to Sister Mary Joseph Baby, all his fundamental educational writings except *How We Think* and *Democracy and Education*. At Columbia he occupied himself mostly with philosophic problems. She concludes that Dewey's educational and philosophical ideas developed concomitantly, the former not

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having been derived from the latter, as is usually thought. 84

The following is her critique of the new education. Instrumentalists find the need of integration in the disturbance of the interaction of the organism and the environment, due to the complexity of both the organism and the environment. Catholics find the need in the fall of man, when the will lost control over the other powers. The possibility of integration comes from the redemption. The soul is the principle of integration. Self-expression should have a specific direction. Contemplation is very important in life. 85

While instrumentalists derive political democracy from the social contract, Catholics derive it from God. The training of children to direct their lives by testing in experience the consequences of ideas will result in making individual and social consequences into moral standards. Sister Mary Joseph Baby says that if education is regarded as individual and social growth, it logically excludes arriving at eternal truths. 86

She thinks it impractical or inadvisable to have all learning begin with the child's experience, to have skills acquired incidentally, to abandon the division of subject matter, to envisage the child's life as a whole. The school is not life, since life is not constituted by organized experiences. Often the centers of learning in the progressive schools are petty and the

84 Ibid., 31-34.
85 Ibid., 42-43, 49-53.
86 Ibid., 55-63.
program without unity. She observes that Dewey had several times condemned some practices of the new schools. 87

On the other hand, Sister Mary Joseph Baby holds that many of Dewey's educational principles can be used in Catholic schools, and they are really within the boundaries of Catholic truth. Such educational principles are: to seek intrinsic motivation; to start with experience; to have some teacher guidance; to make the child active; to promote creative self-expression; to develop attitudes. In regard to the desirability of intrinsic motivation, she says that a Catholic must also acquire mortification and other habits of doing what he does not want to do. The new education has been introduced into Catholic schools without changing their required curricula. In Catholic education not democracy but God in the supernatural order must be the end. 88

In some matters the criticism of Sister Mary Joseph Baby may be questioned. First Dewey did not base democracy on the social contract. 89 Secondly, he is responsible for some of the vagaries of the new schools. Thirdly, even if man were living in the natural order he would need integration.

87 Ibid., 63-64, 72.
88 Ibid., 83-84, 86-106, 110-111.
7. Is Catholic Education Democratic?

The third Catholic inquiry has to do with the question, Is Catholic Education Democratic? The question was raised in relation to Dewey's ideas on democracy, as the topic of the doctoral dissertation of Valine at Ohio State University.

After reviewing the history of American democracy, Valine calls attention to the fact that conditions in the Northwest territory fostered individuality and opposed special privileges, there being a great measure of freedom from federal government supervision and from local government regulation. Then industry and high finance came on the scene they took on the character of special privilege, thus coming into conflict with traditional democracy, which survived in mere words and emotions.

Dewey believed that out of industry and through it the spiritual side of the frontier democracy, in the sense of equal opportunity and freedom to everyone irrespective of his birth or social status, should be developed. The first step in this development is to realize that this conflict is a fact. The second step is to have a deep socialized spirit pervade American society. This implies a central common purpose, the conscious direction of actions toward this social purpose, cooperation among individuals and institutions. In this way, thinks Dewey, the growth of individuals would be advanced, since the best development is always possible in social activity or

The concept of life and so also of education, according to Dewey, consists in the individual and society ever growing to new and better results, harmonious with the ideal of equality of opportunity and of freedom for all. This growth takes place in continuous reconstruction of experience through inquiry. Hence there are no fixed goals. A fixed end halts individual growth and social progress, canonizes the status quo, and atrophies activity. And education with a fixed end opposes growth, neglects the uniqueness of the individual, retards progress. The misery of the present industrial system consists in the use of science and technology for private profit as a fixed end.

Science is a method of inquiry. Briefly the method is thinking in terms of acting and doing, beginning with a problem, setting up an hypothesis for the solution of the problem, and verifying the hypothesis through its consequences. This scientific method should be extended to all fields of human activity, particularly to the field of social value which the democratic ideal involves. The other methods, such as authority, custom, routine, self-interest of a class made to appear as service, and force are objectionable. The adoption of the scientific method as the method of active intelligence implies the elimination of any form of indoctrination. The learner should remain an independent judge of the idea proposed amid social or individual effort to secure its acceptance.

Since, in Dewey's opinion, life is continuous growth in terms of
scientific inquiry, an "after-world" as a final end is irrelevant fantasy, an obstacle in the way of scientific progress, and "not consonant with the main tenor of modern life." Hence the supernatural is beyond experience and as such may be either disregarded or considered non-existent.

It is the active view of knowledge as against the spectator view that rejects the Ultimate Unchanging Being, God, who is the basis of the spectator conception. In place of another world or some far-away unrealizable goal, the active view of knowledge projects the ideal "as a method for understanding and rectifying specific social ills." Malina next makes some comparisons between Dewey's ideas of democracy, italicizing them, and Catholic doctrine.

1. "The American democratic ideal is the ideal of equality of opportunity and of freedom for all, without regard to birth and status, as a condition for the effective realization of that equality." The Catholic Church, though not democratic in its organization, desires that government insure the general welfare of its citizens. St. Thomas and other writers show preference for the democratic form.

2. "The democratic ideal calls for moral equality of opportunity." In Dewey's opinion, besides the political ideal, democratic equality includes "the equal right of every individual for opportunity to make his own career and develop his own personal being . . . without allowing fixed classes and

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92 Dewey, Quest for Certainty, 107.
93 Dewey, Reconstruction in Philosophy, 124.
cates; . . . faith in the possibility of an abundant life for all, not only materially but culturally. 94 Although man is unique, all men are morally equal. Catholic philosophers hold the right of each person to develop his abilities and potentialities to the highest degree possible not only because of uniqueness but also because of the infinite value of the human individual.

The equality of the different members of society consists solely in this: That all men come from the hand of their Creator; that they have been redeemed by Jesus Christ; and that they will be judged, rewarded, or punished by God according to the exact measure of their merits and of their demerits. 95

3. "The perpetuation of democratic ideals calls for greater cooperativeness and socialization of outlook." Dewey emphasizes that problems, whether political, economic, educational, or institutional, need for their solution increased common interest and cooperative endeavor. From the days of the infant Church onward Catholic philosophers have stressed cooperative fraternal love and effort. The Bishops in 1919 called for social reconstruction through increased socialization, 96 and Pius XI in 1931 pleaded for greater cooperation and social-mindedness. 97


b. "The democratic ideal calls for the elimination of domination of American institutions by the private profit motive." The Catholic philosopher agrees with Dewey that the elimination of the profit motive as the dominant factor in economic life is an urgent problem and that the common good should be substituted in its place.

Valine makes some general criticisms. The Catholic philosopher admits some of Dewey's statements entirely, some partly, and some not at all. He has no quarrel with the following: with life there is continuous activity; experience is interaction; experience is intelligent because man can learn through it, this being unique to man; man can learn because he can respond to meanings; man can change things that have meaning; needs start experimentation. He admits that the hypothesis has an important place in getting knowledge, but he denies that it is the only way. Dewey used the example of hearing a noise, then on the hypothesis that it is the street car, he went to the window to verify it. Had he stood at the window, counters Valine, Dewey would have heard the noise and seen the street car and he would not have needed an hypothesis to know that the street car caused the noise.

If hypotheses were necessary for all kinds of knowledge, the principle of contradiction would not be true.

The Catholic philosopher rejects some of Dewey's ideas. These are: want is identical with knowing; doing is knowing; every idea is an hypothesis; every truth is hypothetical. Dewey rejects the spectator theory of knowledge, yet knowledge involves a mind-correspondence to reality. Responding to meaning is not intelligence but an exhibition of intelligence. Dewey rejects the
dualism of body and soul, but, says Maline, a "substantive immaterial coefficient" is necessary in man because otherwise the response to meaning cannot be explained and universal concepts cannot be produced in man by the extended material thing.

The investigation by Maline is very thorough. Agreements and differences between Dewey's position and the Catholic position are indicated in detail. Interesting in particular is the exposition of how the supernatural life is growth toward the Beatific Vision. The objections that Christianity has not eliminated unemployment and war and that it indoctrinates are particularly well-handled. Comparison between Dewey's theory of education and the Catholic one is comprehensive.

6. Consensus Between Instrumentalism and Catholic Ideas

About five years ago the Philosophy of Education Association became actively interested in the relationship between Dewey's experimentalism and the Catholic philosophy of education. A committee was set up to investigate the problem with the result that for several years its members were engaged in drawing up a consensus of the two philosophies of education. John Brubacher was very active in this matter. As a consequence, he included in his 1950 edition of Modern Philosophies of Education the agreements and differences of the two philosophies of education, based partly at least on the reports of the Consensus Committee. 96

Prabaker found considerable consensus in the concrete field of educational practices: proximate educational aims; curriculum; methods of instruction; the use of problem-solving methods; time and place for drill; indoctrination of universally accepted subjects, such as arithmetic; freedom for the individual in arriving at the solution of problems; need for motivation; equalization of educational opportunity; democratic leadership; teacher-pupil planning in certain educational matters; the preservation by the school of the social heritage of race experience; general faculty academic freedom.99

When it comes to philosophic matters in the natural order, the naturalists and the supernaturalists agree that: the analysis of life and culture here and now reveals the proximate educational aims; the basic drives of human nature indicate how interest is to be used for motivation; the natural order is not wanting in a certain sublimity; some educational values are enjoyable on their own account; among spiritual values is knowledge, whether of science, philosophy, or art. Both the naturalist and the supernaturalist are one in making knowledge the ultimate aim of education. The Catholic supernaturalist finds the highest aim to be the Beatific Vision of God, which is an endless act of intellectual knowledge. The naturalist makes the end of education to be more education. On the dignity of the human person the agreement is high. There is finally general approval of public and private education.100

99 Ibid., 326-331.

100 Ibid., 332-334.
There is disagreement between the two camps when the supernatural is introduced.

Those who seek to overcome the uncertainties of education in the natural order by an appeal to certainty in the supernatural order almost put themselves out of communication with those who insist on restricting the universe of educational discourse to the natural order. Yet in all sincerity the supernaturalist does not see, for instance, how consensus on the dignity of man can hold any secure place at the center of educational philosophy unless it has a divine authorship. Similarly moral education is precarious at best unless the child learns that in conforming to moral values he is obeying divine ordinance. Yet the naturalist in all sincerity does not see any more warrant for the theologically supernatural than he does for the metaphysically changeless. It may be supreme emotion on his part to trust his natural capacities in their struggle with the uncertainties of the natural order, but he sees no other resource if he is to be honest with himself. We must himself bear his cosmic anxieties; he cannot shift them to supernatural shoulders. 101

The naturalist bases himself entirely on experience and rejects any fixed truth, since he regards the environment as constantly changing. The supernaturalist accepts self-evident truths and "supports his human experience with divine revelation which he believes to be factually verifiable." Also he holds "that human learning results from more than human initiative, that there is also a divine initiative through grace." 102

Kuhinach has a very good comparison of the various philosophies of education. However, if the comparison were restricted to Devery's experimentalism and the Catholic philosophy of education, the agreements and disagreements would be more extensive.

101 Ibid., 335.
102 Ibid., 336.
Of these eight investigations only that of Frubacher and that of Butler are recent, the former having been published in 1950 and the latter in 1951. Of the others Hook had his work published in 1939 and Mack in 1943; but Hook does not include any criticism and Mack writes only about Dewey's theory of knowledge. Feldman, who made a general study of Dewey's philosophy with no comparison between Dewey's position and the Catholic position, had his work printed in 1932. The three studies of the Catholic writers appeared between 1929 and 1933; hence they may not report Dewey's later ideas adequately. For, since 1933, Dewey has written quite a number of books and a great many articles.
CHAPTER III

SCIENTIFIC INQUIRY

The indispensable condition for achieving knowledge, according to Dewey, is scientific inquiry which owes its development to physics and is the source of our scientific knowledge. It consists of elaborating the problem found in an experience, formulating an hypothesis as the solution of the problem, and testing the hypothesis through operations. Dewey calls inquiry reflective thinking and also experimentation. So certain is he of its necessity for knowledge, of its sole effectiveness for knowledge, and of its ability to solve the problems of life that he never tires of extolling it and he deals with it in one way or another in his numerous writings.

For Dewey, however, scientific inquiry is more than a method. It, as we shall see, is the basis of his logic, conditions his psychology, affects his philosophic ideas, constitutes the learning activity for growth, and has value independent of the result it may accomplish.

1 Dewey, Logic, 3-6.
2 Dewey, Quest for Certainty, 226-227.
4 Childs, "The Educational Philosophy of John Dewey," ibid., 426.
Origin of Inquiry

Two important facts are involved in scientific inquiry. The first is that in the course of evolution biological operations became intellectual to enable the organism to keep or to reestablish its equilibrium by operationally adjusting itself and changing the environment. The second is that in any individual human organism the capacity for intellectual or mental operations develops after birth when the organism needs it; before the intellectual or mental operations occur the organism does not possess the capacity for performing them.

Dewey gives a graphic account of the evolution of the intellectual operations from biological operations.

As organisms become more complex in structure and thus related to a more complex environment, the importance of a particular act in establishing conditions favorable to subsequent acts that sustain the continuity of the life process, becomes at once more difficult and more imperative. A juncture may be so critical that the right or wrong present move signifies life or death. Conditions of the environment become more arduous; it is more uncertain what sort of action they call for in the interests of living. Behavior is thus compelled to become more hesitant and vary, more expectant and preparatory. In the degree that responses take place to the doubtful as the doubtful, they acquire mental quality. If they are such as to have a directed tendency to change the precarious and problematic into the secure and resolved, they are intellectual as well as mental.

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8 Dewey, Quest for Certainty, 224-225.
In the evolution toward the intellectual, symbols were operative. Their existence made "possible deliberate recollection and expectation, and thereby the institution of new combinations of selected elements of experiences having an intellectual dimension." 9

Since intellectual operations evolved from biological operations as interactions between the organism and the environment for the purpose of adjustment between the organism and the environment, and since the evolution of the intellectual operations occurred in and through the formulation and use of symbols, 10 the environment became cultural. In the cultural environment inquiry arose as a factor for the resolution of problems of adjustment. 11 The rise of intellectual actions from biological ones, the use of language, the formation of cultural environment, and the introduction of inquiry, were all factors in making the association of human organisms social. 12

Intellectual operation and inquiry are identical with Dewey. Consequently, he talks of the evolution of inquiry from organic operation the same way as he does of that of intellectual operation. Inquiry is "a development out of organic-environmental integration and interaction." 13

At first inquiries in regard to problems were informal and spontaneous. They had for their purpose the using and enjoying of objects in the

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9 Dewey, Logic, 57
10 Ibid., 43-44, 46, 57.
11 Ibid., 43, 45, 60.
12 Ibid., 43-44.
13 Ibid., 35, 36, 107.
course of ordinary life. In ordinary life when we are baffled by a thing which we are experiencing, we "turn it over, bring it into a better light, rattle and shake it, thump, push and press it," in order to find out what the thing is. This method leads to common sense knowledge. Common sense is life carried on with persons and things in regard to everyday affairs. Primarily it stands for a body of facts accepted by the entire community, constituting good practical sense in handling the ordinary affairs of life. The inquiry of common sense must be distinguished from the inquiry of science. Common sense is concerned with knowing for the sake of doing and making, while science is concerned with doing and making for the sake of knowing.

Through common sense inquiries for the purpose of use and enjoyment, information about things was gradually accumulated that went beyond what was needed for the use and enjoyment of things. This was the case particularly in the fields of astronomy and philosophy. Thus arose the distinction between empirical and rational knowledge, eventually to be called, says Dewey, common sense and science.

The science of physics arose when phenomena were investigated by

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16 Ibid., 50-51.
15 Dewey, Quest for Certainty, 47.
18 Ibid., 73.
controlling experiences. Instruments, such as lens and compass, were adapted to these investigations. The purpose of these inquiries became knowledge in place of use and enjoyment. Symbols, both of language and mathematics, were refined and expanded. Finally, the ideas or hypotheses, instead of being tested through discourse or reasoning, were verified operationally through their application to existential things. With this reference to operational verification the inquiry became scientific. 19

In science, inquiry starts from our everyday life experiences "with things we see, handle, use, enjoy and suffer from." Without systematic attention to the facts of common sense, science could not exist and philosophy would be uselessly speculative. However, the accepted common sense ideas concerning the objects of experience eventually became obscure and indeterminate. 20 Ideas are habitual ways of belief, habits of understanding. As fixed in words, they "show the scheme of values which the community uses in appraising matters that need consideration and which are indeterminate or unassured." 21

Common sense inquiries proceed in terms of qualities and final causes. Scientific inquiries employ measured correspondences of changes and operate with efficient causes. The subject matter of the sciences is stated in symbols very unlike to the symbols of common sense. 22 Although science

19 Ibid., 74-75.
20 Dewey, Quest for Certainty, 103; Dewey and Bentley, Knowledge and the Known, 272.
22 Dewey, Logic, 76.
concludes ends, it has extended the range of ends for common sense. Common sense inquiry and scientific inquiry are fundamentally the same. 23

Science has affected common sense, yet not quite sufficiently. But it has made little impression, according to Dewey, on morals and politics. Many scholars have not discovered the value of science and of its method in their own field of interest. 24

Pattern of Inquiry

Science derives its material from primary experience which Dewey also calls immediate, crude, macroscopic. This experience manifests a situation of doubt, obscurity, conflict, disturbance, indeterminateness. The inquiry starts from this "perplexed, troubled or confused situation," and moves to "a cleared up, unified, resolved situation at the end." 25 The perplexed situation of an experience becomes the resolved situation of the same experience.

The inquiry has the following five steps, which however need not follow in a set order. 26

1. **Suggestion.** A possible solution of the problem in the form of an idea comes to the mind automatically or out of the clear sky.

23 Ibid. 76, 77.
24 Ibid., 75-76.
25 John Dewey, How We Think, Boston, 1933, 106.
26 Ibid., 16-115; Dewey, Logic, 103-114; Democracy and Education, 170-171, 176.
2. **Intellectualization.** The problem is thought over in order to make its nature clearer and more precise or specific.

3. **Hypothesis.** The clearer the difficulty becomes by reflective thinking upon it, the more definite form does the suggested idea for the solution take. Thus the initial suggestion grows into an hypothesis. If need be, the hypothesis is used tentatively with the possible consequence of further clarification not only of the problem but also of the hypothesis.

4. **Reasoning.** By comparing it to accepted conceptual structures, the hypothesis is expanded in the direction of testing it so as to reveal consequences which follow from the hypothesis. When the hypothesis can be stated in a mathematical form, it can be transformed almost to any extent.

5. **Testing the Hypothesis by Action.** Through reasoning it is revealed that by adopting the hypothesis certain consequences for the solution of the problem will occur. The hypothesis is observed in the actual or imaginative operations of its consequences. If the results of the operations agree with the results discovered by reasoning and especially if it can be shown that only under the conditions of the hypothesis do these results occur, the hypothesis has been tested until new facts should reveal the need for revision.

The inquiry initiated by the doubt concerning the experienced qualities or ideas of these qualities is reflective thinking. Its function is "to transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort, into a situation that is clear, coherent,
settled, harmonious. 27 What characterizes this reflective thinking as practiced in the sciences is "the presence of conditions for testing its results." With fixed self-evident truths, reflective thinking takes the form of proof and reasoning. "Reasoning is marshaling a series of terms and propositions until we can bind some doubtful fact firmly to an unquestioned, although remote, truth"; while proof "is the acceptance or rejection justified through the reasoning." In science, thinking "takes the form of inference instead of proof." 28

**Starting Point of Inquiry**

Inquiry arises from a perplexity in primary, immediate, crude, macroscopic experience. Although the scientific method deals with human experience and originated through it, science does not mention experience during its inquiries. "The reason is that everything designated by the word 'experience' is so adequately incorporated into scientific procedures and subject-matter that to mention experience would be only to duplicate in a general term what is already covered in definite terms." 29

Primary immediate experience is perception in which we do something to the stimulus environment and the stimulus environment does something to us. No perception, visual or otherwise, is an original, primitive, and

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simple mode of consciousness, referring to itself and at once to real things in space outside the organism. An excitation by a stimulus on a peripheral organ "is affected by literally everything going on within the organism. It is pure fiction that a 'sensation,' or stimulus travels undisturbed in solitary state in its own coach-and-four to enter the brain or consciousness in its purity." The qualities observed in a perception are not qualities of the stimulus but are the qualities of the response to the stimulus. A stimulus is not the object perceived, but it produces a perceptual response and the qualities of this response are the objects perceived. The qualities of the response are signs; of what they are signs is a problem to be solved by scientific inquiry. For example, inquiry in physics has revealed that visual qualities of color are signs or evidence of electro-magnetic disturbances. These disturbances, however, are not observed; only colors which constitute the consequent reactions are observed. 30

There is no ground for holding that perception "has intrinsic properties or qualities marking it off from other forms of consciousness," and is "the original form of elementary awareness from which other forms of cognitive consciousness develop." As a matter of fact, for us a quality of any perceptual response to a stimulus has already acquired a meaning through inquiry. Hence the qualities perceived "are meanings, rather than just events or existences, ... expressed in expectations, beliefs, inferences, regarding their potentialities." Usually in the act of perception we are not

30 Ibid., 332, 333, 336, 337n.
aware that the objects are events with meanings elaborated through an infer-
ential procedure; only analysis of what we perceive brings that fact out.31

We describe an experience as intellectual, emotional, voluntary,
practical, by way of interpretation. In having an experience, even a man
of science may get excited about it and may be jubilant about its possibility
for solving an important scientific problem, becoming all absorbed in it so
that he forgets about eating and sleeping. Still the final important char-
acteristic of experience is intellectual. An experience always has unity
through a prevailing quality.32

When the primary experience contains a troubled situation there is
reason for inquiry. A situation is an event or object as "a special part,
phase, or aspect of an environing experienced world."33 A confused or an
indeterminate situation is the antecedent condition of inquiry. But in-
determinateness must be unique making "that situation to be just and only the
situation it is."34

This confusion or indeterminateness or doubt is both in us and in
the situation. We are doubtful, confused, indeterminate because the situ-
ation is inherently so. To regard the doubt, confusion, indeterminateness as

31 Ibid., 338, 332, 317, 324, 333, 335.

32 Dewey, Quest for Certainty, 266, 267; Art as Experience, New
York, 1934, 37.


34 Ibid., 105.
belonging only to us and not also to the situation is subjective psychology.\textsuperscript{36}

Even more existential conditions unqualifiedly determinate in and of themselves, they are indeterminate in significance: that is, in what they import are ported in their interaction with the organism.\textsuperscript{36} As the organic imbalance of hunger, so is the indeterminate situation due to existential causes.\textsuperscript{36}

The indeterminate situation is not intellectual or cognitive; it is pre-cognitive, a necessary condition to the cognitive operations of inquiry.

Then we undertake the inquiry the indeterminate situation becomes problematic.\textsuperscript{37}

\section*{Development of Hypothesis}

At the beginning of the inquiry reflective thinking must make clear that the problem is, and this problem must grow out of the indeterminate situation. The problem can be recognized because the indeterminate situation is not completely indeterminate; if it were completely indeterminate, it could never be converted into a problem. Hence the first step in the inquiry is to discover in the situation those constituents which are settled. These constituents are the facts of the case.\textsuperscript{38}

As the facts of the problem emerge, an idea of a possible solution

\textsuperscript{36} Ibid., 106; H. A. Clurman, \textit{The Logic of Imagination}, New York, 1952, 10-51.

\textsuperscript{37} Ibid., 106-107.

\textsuperscript{38} Ibid., 107.
may appear. "Such an idea consists of anticipated consequences of certain
operations. The clearer the facts of the problem become, the clearer grows
the idea of how to deal with the problem."

The idea of a solution is the anticipation of some happening, of a
possibility. The anticipation is grounded in a set of controlled observ-
ations and of regulated conceptual ways of interpreting them. An observ-
ation consists of 'the restrictive-selective determination of a particular
object or quality within a total environing field.' Through observation
the problem is located, while through conceptual materials a solution is
revealed.

The solution may be a suggestion, a flashing up in the mind. At
first it is usually vague. Suggestion is not an idea, but every idea origi-
nates as a suggestion. It becomes an idea when it is examined by way of
reasoning in relation to its ability of solving the problem. The reasoning
takes place with symbols in propositions. We note that the meaning content
of the idea implies in relation to other meanings in the system of which it
is a member, the formulated relation constituting a proposition. This may
have to be continued until we come to a meaning, which, by indicating the
operation to be performed, seems best for the solution of the problem. The
suggestion thus developed into an idea directive of the operations for the

39 Ibid., 109.
40 Ibid., 109-110.
41 Ibid., 150.
The observed facts of the case which clarify the problem are existential, while the content of ideas which indicate a possible solution of the problem are non-existential. Both, however, are operational. The facts of the problem are operational in so far as they are not self-sufficient, result from observation through bodily organs and instruments, form an ordered whole as required by the operations prescribed by the ideas for solving the problem. This organized whole can be achieved only in so far as the facts interact with one another.

During the inquiry not only the idea but also the facts of the case are tested, the operative force of both being revealed according as they are connected with the experiment.\(^1\)

As we have already observed, Dewey states that an indeterminate situation of an experience which is completely indeterminate cannot be submitted to inquiry.\(^2\) What makes a doubtful situation determinate in part is the existence of concepts in relation to which the facts of the problem can be elaborated and the hypothesis developed. It is in his Logic that Dewey emphasizes the need of conceptual structures for inquiries. To a large extent inquiry in history, he says, lags behind that in science because historians have not revealed the conceptual structures they use in their investigations.\(^3\)

\(^{1}\) Ibid., 110-111.
\(^{2}\) Ibid., 112-113.
\(^{3}\) Ibid., 109.
\(^{4}\) Ibid., 233.
To determine the indeterminate situation whether the morning and evening star are the same planet certain conceptions of the solar system are required.\textsuperscript{16}

The investigation of the source of malaria could not be undertaken "until some diseases were known to be of parasitic origin."\textsuperscript{17} Conceptual structures are required in geological investigations.\textsuperscript{18} These concepts enable us to institute operations for discriminating and ordering the facts of the problem and the hypothesis and for directing the experimentation.\textsuperscript{19}

At times considerable attention is given for developing the conceptual material. When this is done, it must be for the purpose of instituting and directing "just those operations of observation that will secure ... just those existential facts that are needed to solve the problem at hand."\textsuperscript{20}

**Testing the Hypothesis**

Through the conceptual structure the hypothesis can be developed to the form in which it instigates and directs the experiment to test it. An experimentation takes place when "conditions are deliberately arranged in accord with the requirements of an idea or hypothesis to see whether the

\begin{itemize}
  \item \textsuperscript{16} Ibid., 249.
  \item \textsuperscript{17} Ibid., 134.
  \item \textsuperscript{18} Ibid., 166.
  \item \textsuperscript{19} Ibid., 142.
  \item \textsuperscript{20} Ibid., 133.
\end{itemize}
results theoretically indicated by the idea actually occur."\textsuperscript{51}

Dewey insists that the hypothesis should be tested through experiments. Science cannot be without experimentation; "experimentation is a form of doing and making."\textsuperscript{52} Doing and making are required for rendering an indeterminate situation determinate, the ultimate aim of the inquiry.\textsuperscript{53} The presence of experimentation reveals that "inquiry effects the existential transformation of the existential material that instigates the inquiry."\textsuperscript{54} Through experimentation we try to exclude anything that is irrelevant to the problem and provide new existential materials for the solution of the problem.\textsuperscript{55} It may happen that an hypothesis is established by reasoning. If so, it should be used as an hypothesis to be employed in directing operations of observation, an idea to be tested or "proved" by the consequences of these operations.\textsuperscript{56}

While Dewey recognizes the practical difficulty in making experiments for verifying hypothesis in social problems, he thinks that every measure of social policy can and should be regarded as an experiment.

\textsuperscript{51} Dewey, How We Think, 11th.
\textsuperscript{52} Dewey, Logic, 130.
\textsuperscript{54} Dewey, Logic, 163.
\textsuperscript{55} Ibid., 16.
\textsuperscript{56} Ibid., 130.
For (1) it represents the adoption of one out of a number of alternative conceptions as possible plans of action, and (2) its execution is followed by consequences which, while not as capable of definite or exclusive differentiation as in the case of physical experimentation, are none the less observable within limits, so they may serve as tests of the validity of the conception acted upon. 57

As an experiment a social policy would lead to greater care in formulating a plan of action. For example, the recognition of the experimental nature of a legislative policy would require that it be made as definite as possible in terms of well-thought-out alternatives, that while in operation it be constantly observed in its consequences, and that it be subject to revision in the light of these consequences. 58

In moral problems also a person may treat his overt actions as experimentations, giving "alert attention to what they teach him as well as to the non-intellectual consequences." 59 He may also test the value of the hypothesis by going "consciously over the past experiences in considerable detail." 60

This view of experimentation does not agree with Dewey's definition of experimentation as already given. In How We Think where he defines experimentation, he gives two types of overt actions for testing an hypothesis,

57 Ibid., 508-509.
59 Dewey, How We Think, 115-116.
60 Ibid., 117-118.
nearly, direct observation and experimentation. But nowhere does he seem to elaborate direct observation as a way of testing the hypothesis.

In the same book, as we have seen, he adduces imaginative action as an operational test of the hypothesis. As Dewey insists on using the scientific inquiry for determining a system of ethics, imaginative operations seem to be necessary there. Certainly he would not want a person to arrive at the ethics of taking human life by actually killing people. But a person could represent imaginatively the taking of human life in various circumstances, elaborating the consequences from such actions so that from the consequences he may determine in what conditions it is right to take human life or whether it is right at all. Indeed in discussing the value of symbols, Dewey speaks of imaginative operations. "If a man starts a fire or insults a rival, effects follow, the die is cast. But if he rehearses the act in symbols in privacy, he can anticipate and appreciate its results." Since Dewey looks upon scientific inquiry alone as legitimate, he must believe that he uses it in his writings when establishing his own positions. Evidently there he does not test his philosophic ideas or hypotheses by experimentation. How then does he test them? He gives the answer in Experience and Nature. He rejects the non-empirical method prevalent in philosophy because the subject matter is not verified, ordinary experience

61 Ibid., 112.
62 Ibid., 107.
63 Dewey, Quest for Certainty, 151.
does not get enlarged and enriched, and as a consequence the subject matter
"becomes arbitrary and aloof." The empirical or scientific method, however,
even of philosophy . . . two things: First, that refined methods and
products be traced back to their origin in primary experience, in all
its heterogeneity and fullness, so that the needs and problems out of
which they arise and which they have to satisfy be acknowledged. Sec-
ondly, that the secondary methods and conclusions be brought back to
the things of ordinary experience, in all their coarseness and crudity,
for verification.

Dewey insists that inquiry should end in the primary experience
where it started. He also gives the manner in which the hypothesis for the
solution of philosophic problems can be tested.

A first-rate test of the value of any philosophy which is offered us is
this: Does it end in conclusions which, when they are referred back to
ordinary life-experiences and their predicaments, render them more signi-
ficant, more luminous to us, and make our dealings with them more
fruitful? Or does it terminate in rendering the things of ordinary ex-
perience more opaque than they were before, and in depriving them of
having in "reality" even the significance they had previously seemed to
have? Does it yield the enrichment and increase of power of ordinary
things which the results of physical science afford when applied in
every-day affairs? Or does it become a mystery that these ordinary
things should be what they are, or instead that they should be at all,
while philosophic concepts are left to dwell in separation in some
technical realm of their own? It is the fact that so many philosophies
terminate in conclusions that make it necessary to disparage and condemn
primary experience, leading those who hold them to measure the sublimity
of their "realities" as philosophically defined by remoteness from the
concerns of daily life which leads cultivated common sense to look
askance at philosophy.65

Evidently this test is not by overt action whether of direct observation or
of experimentaion; so it must be by imaginative action.

62 Dewey, Experience and Nature, 7; Intelligence in the Modern

65 Ibid., 1016.
Ratner, however, makes a distinction between a theoretician and a laboratorian. A philosopher can aim to become scientific in method only as the theoretician in science and not as the laboratorian. A philosopher uses the scientific method by starting from primary, macroscopic experience and by returning to this experience in the act of solving the problem. According to Ratner, Dewey knows that this is all that a philosopher can do.66 While Dewey emphasizes that the scientific inquiry starts from an indeterminate experience and returns to this experience by making it determinate through experimentation he does not seem to distinguish between the inquiry by a theoretician and that by a laboratorian.

Outcome of Inquiry

In the process of being tested, the hypothesis becomes knowledge, i. e., "warranted assertibility." Until the appearance of his Logic in 1936, Dewey used the term knowledge. In his Logic he thinks the term knowledge is somewhat objectionable because it can be regarded to have a meaning independently of its connection with and in relation to inquiry, the theory of inquiry becoming subordinated to it.67 He is against the word "belief" because it can designate something personal which psychology tends to convert into a mental or psychical state.68 In contrast, the phrase "warranted

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67 Dewey, Logic, 8.

68 Ibid., 7.
assertibility" is freed from ambiguities, "involves reference to inquiry as that which warrants assertion," and includes the recognition that the results of inquiry are subject to review in further inquiries. 69 Dewey uses also the terms grounded assertion, justified assertion, grounded proposition, warranted judgment, warranted conclusion. 70

At the end of an inquiry the person who made it should critically review all its stages and evaluate the conclusion or warranted assertion, relating the facts and ideas to the conclusion. 71

A Sample Inquiry

To reveal the course of an inquiry we shall follow the inquiry in regard to the problem of the source of malaria which Dewey describes for the purpose of showing how induction through if and then propositions grounds the hypothesis as the solution of the problem and at the same time generalizes the solution. Dewey insists that the if and then propositions in which the hypothesis is the antecedent cannot establish the hypothesis.

Primary experience in the Panama Canal Zone revealed the prevalence of malaria. The prevalence of malaria involved the doubtful and indeterminate situation as to what was the source of malaria. The problem therefore was the source of malaria. This problem was resolved by the testing of a series of progressive partial hypotheses.

[References]

69 Ibid., 9.
70 Ibid., 139, 143, 149, 195, 216.
71 Dewey, How We Think, 75, 116.
In considering malaria three facts were noted: that malaria meant
bad air; that the closing of windows seemed to prevent its acquisition; and that
the disease had the definite symptoms of recurrent fever and chills. The last
fact made the problem clearer and was an aid in carrying on the inquiry to
solve the problem. But none of the facts suggested was an hypothesis or
constituted a conceptual structure.

However, it was already known that some diseases were of parasitic
origin, that in malaria parasites were present in the blood, and that the
disease filariasis was due to the bite of a mosquito. These three facts
formed the conceptual structure, the consideration of which might reveal an
hypothesis and aid in setting up an operation for testing it. Then we con-
sider in the system of diseases that some, and among them malaria, seem to
be of parasitic origin, and that a disease can be spread by a mosquito bite.
It apparently follows that a mosquito could get the disease parasite by
feeding on a patient who has the disease and then by biting a well person
transfer to him the disease parasite. Hence it may be that a mosquito is
the source of malaria. At this point then the hypothesis is: A mosquito is
the source of malaria.

When the hypothesis was examined to discover its consequences in
view of devising a plan for testing it through its consequences, it was found
that the hypothesis must be solved progressively. Consequently the original
hypothesis had to be tested serially through subhypotheses. The procedure
of testing series of hypotheses is induction through if and then propositions.

The first step in testing the hypothesis that a mosquito is the
source of malaria was with the consequent that biting a malaria patient would develop the malaria parasite within it. The hypothesis with its consequent set up in an if and then proposition would have this form: If a mosquito is the source of malaria, its biting of a malaria patient will implant the malaria parasite in its own blood. The presence of the consequent was tested by observation. It was discovered that the anopheles variety of mosquito after feeding on a malaria patient developed pigmented cells which were identical with the blood parasite of the malaria patient at an early stage of malaria.

This lead to the next step in testing the original hypothesis, with the formulation of the subhypothesis that a mosquito with pigmented cells will communicate malaria to a well person by biting him. This step expressed in an if and then proposition would read: If the anopheles mosquito is the source of malaria, it will after feeding on a malaria patient give a well person malaria on biting him. This step of the hypothesis was tested by an experimentation. An anopheles mosquito was permitted to bite a malaria patient and then it was lead to bite a well person. The well person contracted malaria.

To complete the induction the hypothesis was formulated that the anopheles mosquito is the only source of malaria. Expressing it with its consequent we have the if and then proposition: If the anopheles mosquito were the only source of malaria, its being prevented from biting people would eliminate malaria. The consequent was tested experimentally by keeping the mosquito from breeding through the draining of swamps, the covering of
water breeding places with oil, and the using of other methods. Through these methods malaria was eliminated.

In this problem of the source of malaria, induction through a series of if and then propositions made the case of the anopheles mosquito a sample or representative case, so that the judgment that the anopheles mosquito is the source of malaria became grounded and with it was grounded also the judgment that the anopheles mosquito alone is the source. The stating of an hypothesis through if and then and only then propositions is induction. 72

Inquiry Continuous

Inquiry cannot resolve a problem once for all. "There is no such thing as final settlement, because every settlement introduces the conditions of some degree of a new unsettling." In resolving the problems present in the mental interaction between the organism and the environment, new problems appear. Indeed the raising of new problems is the one objective of inquiries. As soon as it is thought that a final solution can be found we have not inquiry but apologetics or propaganda. 73

The appropriation of the term warranted assertion for the outcome of an inquiry implies that inquiry is a continuing process, a going concern. 74 An inquiry successfully conducted is an aid for bringing other inquiries to

73 Ibid., 35.
74 Ibid., 8-9.
acceptable conclusions.75 Also the outcome of an inquiry gains in warranted asser
tibility by its being examined and used for practical purposes and for other inquiries.76 "Inquiry is progressive and cumulative."77 "The criteria for the validity of . . . hypotheses is the capacity of the new data they produce to combine with earlier data . . . so that they institute a whole of unified experience."78

Scientific Inquiry Necessary for All Problems

Throughout his writings Dewey promotes only the scientific inquiry as a legitimate form of investigation.79 Although he regards its universal effectiveness as an hypothesis,80 he does not accept any other method. Ratner says no valid alternative is possible.81

Inquiry deals with all problems whether of pure science, such as physics82 and zoology, or of practical science, such as engineering; and

75 Ibid., 110, 316.
76 Ibid., 190.
77 Ibid., 311.
78 Ibid., 327.
80 Dewey, Quest for Certainty, 191.
medicine. Indeed pure science has eventually been turned into use and at the present time this happens very quickly. We have knowledge of things, when we are "at home in them. . . . Thus conceived knowledge consists in engineering, medicine and the social arts more adequately than it does in mathematics and physics." The solution of all hypotheses whether in the field of pure or practical science is by making something existentially.

Dewey wanted the scientific method to be used in philosophy, presumably he used it in philosophic problems throughout his writings. We had the utmost confidence in its value for solving our social problems. In the 1938 edition of his Logic he included an entire chapter on social inquiry. Writing in 1940 of our ills and perplexities, he stated unhesitatingly that our predicament was due to the fact that we had not used the scientific method of experimentation to develop a system of morals in relation to our present civilization. The use of the scientific method would better things.

As physical science has brought about an organization of the physical world along with an organization of practical habits of dealing with that world, so ethical science will effect an organization of the social world and a corresponding organization of the mental habits through which the individual relates himself to it.

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The division of the social sciences into departmentalized and supposedly non-interacting fields—economy, politics, jurisprudence, morals, anthropology—is a great obstacle to developing social inquiry. These conceptual barriers should be broken down "so as to promote cross-fertilization of ideas, and greater scope, variety and flexibility of hypotheses." 89

At the start of the inquiry there is an obstacle in the tendency to consider the social problems in moral terms. While it is true that social situations are largely moral, still for purposes of inquiry the social problems should be formulated without any reference to the qualities of vicious or virtuous motives. 90

The social phenomena should be considered in their history which includes the present social events; otherwise the social conditions will not be correctly evaluated.

While in physical inquiries associated activities are indirectly involved, in social inquiries they are directly present both in the operations to be performed and in the proposed solution through the hypothesis. Those who are to execute the operations the hypothesis formulates and directs must work in an organized association.

Conceptual subject matter in social inquiry is needed "to control the selection, arrangement and interpretation of facts." It is then tested

89 Honey, Logic, 508.

90 Ibid., 498
and revised in the process. It does not consist of first or ultimate or self-evident principles. 91

Dewey became so habituated to his adopted scientific method of inquiry that he thought out some of his philosophic problems relative to his life with his family and other groups.

Then, to take an example, I formed the idea that the "mind" of an individual, the set of beliefs expressed in his behavior, is due to interaction of social conditions with his native constitution, my share in the life of the family and other groups gave the idea concrete personal significance. Again the idea that lay back of my educational undertaking was a rather abstract one of the relation of knowledge and action. My school work translated this into a much more vital form. I reached fairly early in the growth of my ideas a belief in the intimate and indissoluble connection of means used and ends reached... My ideas tend, because of my temperament, to take a schematic form in which logical consistency is a dominant consideration, but I have been fortunate in a variety of contacts that has put substance into these forms. The fruits of responsiveness in these matters have confirmed ideas first aroused on more technical grounds of philosophical study. My belief in the office of intelligence as a continuously reconstructive agency is at least a faithful report of my own life and experience. 92

**Hegelian Triad Involved in Dewey’s Inquiry**

The scientific inquiry which starts from an indeterminate experience and by formulating an hypothesis and testing it comes back to the same experience in order to make it determinate is reminiscent of the Hegelian inquiry technique. Sanders found Dewey’s *Democracy and Education* pervaded

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91 Ibid., II:149, 536-537.

by the Hegelian triadic scheme. These triads are: thesis, which is a positive fact; antithesis, which opposes and denies the thesis; and the synthesis, which results from the antithesis differentiating the thesis.

"Each synthesis gives rise to a new thesis; the opposite of the new thesis proceeds from it, and a more determinate category synthesizes the pair of opposites." 93

Sanderson draws up the entire triadic scheme of Dewey's famous work on philosophy of education.

The major triad of the book is comprised of education method, the thesis, which is abstract and subjective; educational subject matter, the antithesis, which is objective and tends to specify method; and philosophy of education, the synthesis. . . . (Method is comprised of three moments: education as growth, aims in education, and thinking. Each of these, in turn, is comprised of three moments, and so on, until all concepts making up the text are accounted for.)

The triadic nature of the movement of Dewey's inquiry is evident another way. He begins with a statement which he uses as his hypothesis or has already established as an hypothesis—the thesis; then he opposes it or contrasts with it historical and current philosophic opinions—the antithesis; and ends in confirming or establishing or enlarging the thesis—the synthesis. Let us take as an example chapter twenty-five of his Logic

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95 Idem, 328-329.
entitled, "The Logic of Inquiry and Philosophies of Knowledge." Here he takes it for granted that he had established his scientific inquiry as the method of knowledge or of warranted assertion.

In relation to the problem of the chapter as designated by the title he places the following thesis. A philosophical theory of knowledge must observe all the conditions of inquiry, and it is not enough to use some conditions in isolation from the others. As the antithesis he contrasts the various theories of knowledge with the thesis and finds them wanting in one way or another. For example, Absolute Idealism is guilty of "one-sided selection of what actually takes place in controlled inquiry" and generalizes it "beyond the limits of consummatory outcomes of the inquiry." The synthesis is "an indirect confirmation of the position taken in the book," so that the theory of inquiry assumes and holds "a position of primary importance."

Independent Value of Inquiry

Dewey emphasizes the learning of the experimental method over the learning of the subject matter in education and in philosophy, valuing its

97 Ibid., S11.
96 Ibid., S16-534.
99 Ibid., 533-534.
100 Ibid., 534-535.
use more than the results attained by it. The method "to be used in judging existing customs and policies proposed is of greater moral significance than the particular conclusion reached in connection with any one controversy." 101

A steadily increasing number of persons

find security in methods of inquiry, of observation, experiment, of forming and following working hypotheses. Such persons are not unsettled by the upsetting of any special belief, because they retain security of procedure. . . . The guardianship of truth seems to them to have passed over to the notice of attaining and testing beliefs. In this latter fundamental they rest in intellectual and emotional peace. 102

They enjoy the delights of thinking and of inquiry which they would hardly exchange for other pleasures. 103

Summary of Inquiry

This reflective thinking or inquiry just analyzed and described constitutes the experimental method. It starts with observed facts as involving difficulties or doubts; these are the data. "The suggested solution for the difficulties disclosed by observation form ideas." These ideas are the hypotheses, standing for possible ways and ends of resolutions. These data and these ideas are subjected to reflective activity carried on by observation (with memory of prior observations) and inference. Inference relates to what is possible and starts with a hypothesis "by acting upon it,

101 Peoney and Tufts, Ethics, 376.


103 Peoney, Individualism Old and New, 161.
and ends with testing the hypothesis overtly if possible, otherwise in imagination, or in symbols. 104

This acting involves operations with techniques and organs of observation. The operations, being existential, modify the existential situation from which the inquiry started. Symbols by way of defining terms and propositions are required in order to enable the ideational and existential subject matter to control the inquiry. The inquiry has about it a temporal quality in the sense that "the objective subject-matter of the inquiry undergoes temporal modification." The material in so far as it undergoes modification during the inquiry is the subject matter, while in so far as it has been tested or settled by the inquiry it is the object. 105 For things exist as objects for us only as they have been previously determined as outcomes of inquiry. 106 Knowing does not modify the object known. While a planet is known through inquiry from the point of light seen in the sky, knowing does not change the planet. 107

Briefly, the experimental method starts with experience and, having formed an hypothesis, it returns to experience to test the hypothesis. 108

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104 Dewey, How We Think, 106-107; Logic, 117-119.


108 Dewey, Experience and Nature, 36-37; Logic, 7-9; Problems of Men, 316-316.
The subject matter of the experience which is the starting point of the inquiry involves a doubt. The experience which successfully tests the hypothesis settles the doubt and leads to knowledge or belief or warranted assertibility, implying a readiness to act in a given way when the subject matter is existing.
CHAPTER IV

LOGICAL THEORY

Dewey develops his work on Logic from his conception of the nature of scientific inquiry. Logic is an inquiry into inquiry. Hence it need not go outside of inquiry for its subject matter. Specifically, it does not depend upon psychology.¹

Since logic depends on inquiry, it will progress as the method of science improves. "There is no ground for supposing that logical theory has been or ever will be so perfected that, save, perhaps, for minor details, it will require no modifications!"² Its development is conditioned through operations with experiments, symbols, instruments. The operations performed, whether upon existential conditions or symbols, are mental.³

Inquiry the Origin of Logical Forms

If logic need not go outside of inquiry for its subject matter "all logical forms (with their characteristic properties) arise within the operations of inquiry so that it may yield warranted assertions."⁴ Logical

² Ibid., 16.
³ Ibid., 16-15.
⁴ Ibid., 3-4, 101, 372, 374.
forms arise in inquiry in the sense both of originating in the operations of inquiries and of being revealed in the conducting of inquiries. 5

Logical forms are formulations of conditions of inquiry. As such they are postulational, being tested through the inquiries. 6 The undertaking of inquiry commits one to their use, hence they are not arbitrary. They are derived from successful inquiries and they require that future inquiries embody these until future inquiries indicate the need of modifying them. 7

Inquiry Carried on in Symbols

The evolution of biological operations into intellectual operations of the common sense inquiry for the purpose of preserving or reconstituting equilibrium in view of the future involved the formation and use of symbols and the change of human association into society. The development of intellectual operations of the common sense inquiry into the reflective thinking of scientific inquiry and their use require the cooperation of human individuals and the further formation and use of symbols. Logic, therefore, being an inquiry into inquiry, is a social discipline and is connected with symbols.

Reflective thinking takes place in symbols. Symbols may be residues, words, or elaborate constructions. Symbols are the necessary conditions for the existence of meanings. 8 Through symbols we act without acting.

5 Ibid., 4.
6 Ibid., 16-17.
7 Ibid., 17.
8 Ibid., 17-20.
If a man starts a fire or insults a rival, effects follow: the die is cast. But if he rehearses the act in symbols in privacy, he can anticipate and appreciate the results. Without symbols, "no intellectual advance is possible; with them, there is no limit set to intellectual development except inherent stupidity."

Judgment Related to Conclusion of Inquiry

Propositions are intermediate and representative in their function during inquiry, while judgments are the outcomes of the inquiry and have existential import. Final judgment is attained through a series of partial judgments.

The subject matter of a judgment is a situation in the sense of a unique qualitative existential whole. The subject of a judgment comprises the observed facts of the problem in so far as they differentiate the problem and provide the evidences for its solution.

The predicate is the hypothesis or an anticipated possible solution

9 Dewey, Quest for Certainty, 151.
13 Ibid., 124.
of the problem. It is the meaning of the possible solution of a problem. It is related to the subject as the possible to the actual. It is a method of solution and not the solution. 16

The copula is constituted by the functional and operative correspondence of the subject and predicate. It designates the functional correspondence between the subject and predicate in their relation to each other as determined by inquiry. 15 The copula in a judgment expresses accordingly the actual transformation of the subject matter of an indeterminate situation into a determinate one. It has inherent "existential reference." 16

The judgment is a manifestation of inquiry. Its subject-and-predicate content is provisional by way of existential anticipation. 17 It estimates things as signs of other things so that we can prepare for those other things. 18

Substance a Logical Whole

In Aristotelian logic certain objects "are logical subjects by nature, since they are substances by nature." However, science has destroyed eternal substances. 19 Substance is not an ontological determination but a

14 Ibid., 133.
15 Ibid., 125, 132.
16 Ibid., 135.
17 Ibid., 133-134.
18 Dewey, Quest for Certainty, 213.
logical one. It is a unified whole through a number of cohering logical judgments, "completed in operations which have existential consequences."
The subject matter of these judgments is comprised of qualifications of the unified whole. These cohere as dependable evidential signs of what will happen when certain operations are performed. "Being a substantial object defines a specific function." For knowledge things are events; "nature is a system of interconnected changes."

**Affirmation and Negation Functional in Inquiry**

In Aristotle, affirmation and negation have ontological basis and reference through fixed species and fixed essences. Modern science has abandoned the idea of fixed species and of fixed essences. Consequently affirmation and negation have no ontological reference, but they are functional in inquiry. They set forth the relationships "between factual data on one hand and conceptual subject-matter on the other hand."

**Negation of certain facts and ideas**

means that the original indeterminate situation can be transformed or requalified into a determinate one only through existential experimental operative elimination of some of its constituents; affirmation of certain data or ideas means that they are operatively selected to reinforce one another in institution of a unified situation.

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20 Ibid., 126-129.
23 Ibid., 160
24 Ibid., 183.
Existences and meanings are affirmed or denied "not just for the sake of mentioning them." The negative proposition formulates "a change to be effected in existing conditions." The affirmative proposition also implies change. "This is red" means, logically, that a certain differential change has occurred or may be predicted to occur when certain operations are undertaken." This affirmation involves inquiries.25

Propositions Instrumental in the Process of Inquiry

A judgment, being concerned with unique qualitative situations, is individual. Propositions are instrumentalities for reaching the warranted judgment. Consequently, they are provisional. They may be singular, plural, general, or universal. Since propositions are symbolizations, direct action can be deferred through them until inquiry has been accomplished. They are existential if they refer directly "to actual conditions as determined by experiential observation." They are conceptual or ideational if they express possibilities of operations to modify existences.26

There are existential propositions. "This thing is sweet" means either that tasting had produced that quality or the thing will sweeten coffee, milk, and other objects. The copula has the force of an active verb. "To say the dog is ugly" is a way of setting forth that he is likely to snarl

25 Ibid., 168-169
26 Ibid., 263-264.
and life. 27 The subject expresses the means and the predicate the end. 28

The reasoning for developing the hypothesis is carried on in symbolic form or in propositions. 29 In social inquiry influential conceptions should be expressed in propositions; these propositions "stimulate examination of their meanings in terms of the consequences to which they lead and promote critical comparison of alternative hypotheses." 30

Contrariety, subcontrariety, and contradiction among propositions "must be understood in the functional office they exercise in inquiry." 31

**Logical Principles As Conditions of Successful Inquiry**

For inquiry things and events constitute its material and object, while propositions are its means. That propositions may perform their functions, they must satisfy certain logical principles usually termed canons: identity, contradiction, and excluded middle. 32

Identity requires that meanings be stable during the inquiry continues. However, the final issue of the inquiry may modify the existential import of some observed fact and the meaning previously possessed by some

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30 Ibid., 507, 508.
31 Ibid., 190.
32 Ibid., 343-347.
conception. Every conclusion is subject to change in meaning by its fate in further inquiries.33

Contradiction is present between a pair of propositions when one has to be valid and one invalid. The logical condition involved in contradiction is independent of that of identity, but the denial of the principle of identity may lead to contradiction.34

The excluded middle constitutes the completely generalised formulation of conjunctive-disjunctive functions in their conjugate relations—either-one-or-other—but-not-both.35

The three principles are not ontological, they cannot be applied to reality. Nor are they internal relational properties of propositions. Hence direct inspection of a proposition does not reveal whether it contains a contradiction or of a pair of propositions whether they are related in a contradictory manner. They are conditions involved in the successful course of an inquiry, the success of the inquiry validating them.36

Several times Dewey during his discussions uses contradiction with ontological reference and under conditions when he could have known the presence of contradiction only through inspection. For example, he rejects

33 Ibid., 345.
34 Ibid., 346.
the dualism of social and natural as an hypothesis because it would be against the hypothesis of continuity. 37

Cause a Logical Form of Inquiry

Through the category of cause, events experienced as separate and independent become one continuous occurrence. The entering of a bullet into a vital part of the organism is not an antecedent of dying but an integral part of it. Among strictly existential events, no event is any more an antecedent or cause than it is a consequent or effect. On the basis of an existential or ontological interpretation of causality every thing in the universe would be a cause and effect of everything, so that the category of cause would be worthless. The idea of a force or an act of causing outside the events, together with other occult qualities and forms, is found by science to be unscientific. Kaufmann, a disciple of Dewey, concludes that the category of causality or any other category cannot be applied to the world. Such an application would "trespass the boundaries of experience" and would make an ontological foundation impossible. 38 The common sense notion of cause, such as "Water quenches thirst," is habitual expectation.

The category of cause is a logical form of an inquiry when there is a problem of resolving events into a single continuous history, the

37 Dewey, Philosophy and Civilization, 61.

problem providing a sufficient and necessary reason for taking one event as an effect or consequent and another event as a cause or antecedent. Practical inquiry begins with an end to be accomplished or an end-in-view and then searches for the means to accomplish it. The logical form of the category of cause is a means-consequent relation. Causality drops out when the events experienced as separate and independent become through inquiry an existential continuum.

**Scientific Laws of Logical Import**

Laws of science or nature are means for turning the spatial-temporal, concrete, existential materials through reasoning and observation into a coherent individualised situation. A law of nature determines the object and its meaning, makes possible the foretelling that a certain event will probably happen, and indicates how to use reality in science and in art. Laws are "formulas for the prediction of the probability of observable occurrence." While they must be taken account of, they do not express fixed properties of unchanging substances.


40 Ibid., pp. 145-146.

Logical Theory Tested by Inquiry

All concepts, general principles, theories, and dialectical developments necessary to any systematic knowledge achieved through inquiry are tested through the inquiry as tools of inquiry, and the plans for settling problems are tested as hypotheses. In this way thinking and belief are experimental and not absolute.42

Theory of Knowledge

The scientific inquiry as means of knowledge answers the problem of knowledge itself. It excludes any immediate knowledge. The rationalists accept ultimate principles of a universal character as immediately known through reason, while the empiricists believe sense data to be immediately given through sense perception.43

The reasons for the conviction of the rationalists are various. The reason could be the fact that the conclusion of one inquiry becomes through its continuity the starting point of another. Some of these conclusions, from which other inquiries arise, could have become confirmed so often that they come to be looked upon as self-evident. The second reason could be propositions. They are means during inquiry. Since they are often used, their being means could be forgotten so that they are regarded as immediately known. The third possible reason could be the opinion that the starting

43 Dewey, Logic, 139.
point of inference must be something immediately known. But this opinion is contradicted by inquiry. "It is notorious that a hypothesis does not have to be true in order to be highly serviceable in inquiry."\(^{14}\) In fact such immediately known principles are not required. It is sufficient to have hypothetical material to direct the inquiry into channels which will disclose new and more relevant material for the problem.\(^{15}\)

The doctrine of immediate knowledge is also due to ambiguity of words. Knowledge in its honorific sense is identical with warranted assertion. But it also is used for understanding and apprehension. We understand a centaur and the transmutation of chemical elements without thereby having ground for asserting their reality. Since we understand directly the meaning of these things, it is assumed that we directly understand their existential reference.\(^{16}\)

Again in seeing them we apprehend directly that this thing is a typewriter and the other thing a radiator. But what is seen "is a product mediated through certain organic mechanisms of retention and habit, and it presupposes prior experiences and mediated conclusions drawn from them."\(^{17}\)

All knowledge in the sense of warranted assertion is mediated. An inferred idea is tested through its capacity "to order and organize

\(^{14}\) Ibid., 146, 147.

\(^{15}\) Ibid., 142, 143.

\(^{16}\) Ibid., 143.

\(^{17}\) Ibid.
particulars into a coherent whole." The validity of ideas is judged from their consequences. Not only inference but also testing is required to exhaust logical functions and determine logical forms. 18

Since knowledge is the outcome of scientific inquiry, there are no epistemological problems, but only problems connected with the inquiry itself as to whether it has met the logical conditions set by the requirements of controlled inquiry. The spectator idea in knowledge, involving the problem of whether our conceptions are descriptive of existential material, is based on a misconception of the human act in gaining knowledge. Before inquiry the perceived qualities during gross experience do not constitute knowledge, but they present the problem as to what they mean or of what they are signs or evidences in relation to the existent environment.

When we look at the sky at night, we see dots of light, and the telescope reveals many more light dots. These specks of light raise the problem as to what they mean. "An elaborate system of techniques of experimental observation, directed by an equally elaborate conceptual structure, results in establishing an extensive temporal-spatial continuum, and by placing the light in a definite position in this system solves the problem presented" by the speck of light, the solution being that a sun, so many light years away, is the initial constituent, while the light speck now and here existent is the terminal constituent. 19 The fact the the speck of light


exists here and now, while the sun may have ceased to exist between the time
that the light left it and arrived at the observer presents no epistemological
problem if we remember that the perceived speck of light is not a sun nor
does it represent a sun but that the speck of light is just a speck of light.

The way intelligence developed during the course of biological
evolution excludes epistemological problems and renders the spectator idea
of knowledge useless. There is continuity of development from the amoeba
to man, the development being conditioned by the organism adapting itself to
the environment. When the organism had become so complex that imbalance
easily and frequently occurred, intelligence developed so that by reflective
thinking the organism might preserve or restore equilibrium. The problem is
not whether internal ideas or sensations are copies of existence but whether
reflective thinking has brought about proper adjustment so as to secure
equilibrium or to restore it.50 "Confirmation, corroboration, verification
lie in works, consequences... That which guides us truly is true—
demonstrated capacity for such guidance is precisely what is meant by
truth."51

50 Dewey, Democracy and Education, 392-393.
51 Dewey, Reconstruction in Philosophy, 126.
CHAPTER V

PSYCHOLOGICAL THEORY

Dewey has published a psychology, but it belongs to the period of his life when he was devoted to Hegelianism. In the pragmatic period of his life he wrote no psychology as such, but he does reveal his psychological preferences.

In Inquiry All Mental Operations Involved

When during the evolution of the organism organic operations of interaction with the environment became mental and finally intellectual, psychology had its birth. Intellectual operations are developed from biological operations as interactions between the organism and the environment to adjust the organism and the environment to each other, the adjustment being affected through reflective thinking. At first the reflective thinking was informal common sense inquiry and later it became scientific inquiry. Inquiry is, therefore, the central mental operation and in relation to it all other mental operations have the reason of their being. Dewey calls psychology a branch of inquiry.

From what has already been said, it is apparent that Dewey describes


inquiry in terms of psychological operations. Inquiry begins with perceptual experience that contains a doubt or indetermination and moves by means of reflective thinking, aided by habit, reasoning, inference, syllogism, induction, deduction, to resolve the perceptual experience into a certain and determinate one. The act of perceptual or primary experience is constituted of perception and emotions, while reflective thinking includes emotions and volitions as parts of the inquiry. Motor actions are also integrated with the inquiry. When we observe by looking we must move the head, the eyes, and sometimes we must use instruments. Constituent parts of reflective thinking are overt or imaginative operations with or without apparatus.

We have seen that macroscopic experience, or perception, is an interaction between the organism and the environment. "This interaction is the primary fact, and it constitutes a transaction." Only analysis reveals that there are two factors, the organism and the environment. The qualities of the interaction contain the doubtful, indeterminate situation from which inquiry starts.

Being confronted with the doubtful, indeterminate situation, our response to it is immediately emotional by way of fear, hope, joy, sorrow, aversion, desire, involving concern or solicitude over the doubtful indeterminate situation. When we become interested in resolving the doubtful, indeterminate situation through inquiry and during the inquiry we may first, 

3 Dewey, Philosophy and Civilization, 251-252.
worry, and become anxious about the outcome of the inquiry or be cheered by it.\(^4\)

Connected with the emotional aspect of our reaction to the doubtful, indeterminate situation of the perception is the volitional phase of it. To change the doubtful, indeterminate situation into a certain and determinate one, we must choose an effective hypothesis from among several hypotheses and select from among possible operations relevant ones to test the hypothesis.\(^5\)

While the emotions and choice are involved in it, the inquiry itself is reflective thinking which effects "the actual transition from the problematic to the secure, as far as that is intentionally guided."\(^6\) The inquiry needs the mental operations of reasoning, inference, induction, and perhaps also syllogism and deduction.

During inquiry it is necessary to develop the meaning of ideas or hypotheses through reasoning. The meaning of the hypothesis is considered "in relation to other meanings in the system of which it is a member, the formulated relation constituting a proposition," so as to find what it implies. Such a relation of meanings involves other meanings because they belong to the system. Finally through a series of intermediate meanings we reach a meaning which seems to fit the problem best. Reasoning, in other words, is the developing in and through symbols of the meaning content of an idea in

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5 Ibid., 226.
6 Ibid., 227.
relation to other meanings in the system of which it is a member. 7

Inference has to do with existential material, dealing with the problem of the inquiry in relation to its resolution. 8 It endeavors "to compel things, as they present themselves, to yield up something hitherto obscure or concealed. . . . It aims at pushing out the frontiers of knowledge, not at marking those already attained with signposts." 9

The syllogism states that ideally, or in strict theory, there should be conjugate relation between the major proposition which contains the definition established by inquiry and the minor proposition which states an existential fact observed experimentally, so that a conclusion is logically warranted to yield a resolved determinate situation. 10

Induction directs the transformation of the antecedently given problematic material of perception into resolved material by testing operationally an hypothesis developed deductively from a conceptual structure, the operations being so chosen as to make the case representative, or a sample or a specimen (In the problem of the source of malaria induction makes the anopholes mosquito the specimen), thereby grounding the inferred generalization of the resolution of the problem. 11 Deduction is using already

8 Ibid., 311, 317-318.
10 Dewey, Logic, 323-324.
11 Ibid., 432-437.
established generalizations. 12

Sense Cognition and Intellectual Cognition

This theory that the knowledge is the result of a scientific inquiry successfully conducted does away with the fixed difference between sense knowledge and rational knowledge.

The sensory aspect of knowledge is . . . that aspect of the system of knowledge, in and by which knowledge extending across an indefinitely extensivaly spatial and temporal range of facts is anchored and focalized in that which is here-and-now; 79 while the "rational" aspect of knowledge is constituted by the corpus of extant knowledge which has been constituted by prior inquiries and which is so organised as to be communicable — and hence applicable to results of further inquiry by which the old system is corrected and extended. 13

A judgment of recollection that we have observed such and such an event in the past must be grounded through inquiry.14 Similarly an act of appreciation and other valuations must be the outcome of inquiry or else they are nothing but interjections.15

Mental Operations As Continuous with Biological Operations

From the evolution of the mental Dewey concludes to a continuity of mental operations, including reflective thinking which is distinctive of men, with biological operations of living beings and to a continuity of the

12 Ibid., 419.
15 Ibid., 175; Dewey and Tufts, Ethics, 290-291.
biological operations with the physical operations of the non-living beings. 16

Even now after man has reached the intellectual level in the course of evolution he thinks reflectively or makes inquiry with his eyes, ears, hands, brains. These organs are biological. 17 "Hence, although biological operations and structures are not sufficient conditions of inquiry, they are necessary conditions." However, although the mental operations are continuous with the biological operations, they are not identical with them. 18

Since there is continuity between mental, biological and physical powers, no new force or power or faculty, such as Reason or Pure Intuition, is necessary. If accepted, it would be introduced from the outside. 19

Mental Operations As Different from Biological Operations

The mental acts are continuous with the biological operations, but not identical with them. How are they different? Dewey goes to some length in discussing this question. There is increasing complexity and intimacy of interaction between the organism and the environment from the physical to the psychophysical and then to the intellectual. Each level is accounted for through descriptive categories and not through the operations of forces or powers. 20 The mental operations are different from the biological operations

16 Dewey, Logic, 23.
17 Ibid., 23.
by way of emphasis. "The being who eats and digests is also the one who at the same time is sorrowing and rejoicing; it is a commonplace that he eats and digests in one way to one effect when glad, and to another when he is sad." As man becomes more human, more civilized, the less purely physical and purely mental behavior does he exercise. 

Mental or experiential acts have no existence apart from the subject matter expressed. To think topics, and not thoughts. To love persons, and not loves. At the same time the act of experiencing is not the quality or object experienced. It is not the quality of things experienced that is of value but the qualities that differentiate the acts of experiencing. Color or sound may be an object of an act called sensing and a tree or orange an object of an act of perceiving, but color and sound are not acts of sensing and tree and orange are not acts of perceiving. Still the thing experienced takes on a peculiar quality as experienced. The tree as perceived lends itself to a different type of analyzing than it does as a botanical object.

The various acts of experiencing are not the same. The tree when perceived, remembered, reflected upon, or admired is experienced in different ways, in different acts. However, the structure of the acts of experiencing

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21 Dewey, Philosophy and Civilization, 303.
22 Ibid., 304.
23 Ibid., 261.
24 Ibid., 265.
25 Ibid., 266.
26 Ibid.
can be discovered only by going outside the experiencing.27 If the acts of sensing, loving, admiring, thinking, etc. are termed mental it is "because of something characteristic which they effect, something different from that produced by acts of locomotion or digestion."28 Still there is no justification for making mental acts a psychic existence such as mind, and for turning sensations and percepts into mental contents which intervene between this mind and objects.29 What we have is a great number of original native tendencies: the eyes to follow and fixate light, the neck muscles to turn the head toward light or sound, the hand to reach and grasp, the vocal apparatus to make sounds.30 Mind or intellect is "ability to respond to present stimuli on the basis of anticipation of future consequences."31 It consists of a multitude of ways by which things evoke suggestions for solving problems.32

Dewey proposes as an hypothesis that the distinctive characteristic of the mental is social in so far as it "is empirically discernible only where association is manifested in the form of participation and communication." For, communication through meaning and understanding promotes society and joint behavior.33 In the development of intellectual operations association

27 Ibid., 261-265, 269-262.
28 Ibid., 267.
29 Ibid., 270.
30 Dewey, Democracy and Education, 73.
31 Ibid., 153.
32 Dewey, How We Think, 55.
of organisms became social. Through social intercourse "organic activities are transformed into acts having a mental quality." 31

Mill and Freedom

During inquiry there is the choosing of an idea among several ideas to act as an hypothesis; there is the further choosing of operations among possible operations to test the hypothesis for the resolution of the problem. Frequently the problem of the inquiry is the changing of the environment, in which problem are involved the choosing of the type of change and the method for accomplishing it. While Dewey continuously uses the words, "choosing", "free choice", "freedom", he does not accept free will as an intrinsic power to initiate an activity or direct an activity toward an end without being conditioned by anything intrinsic or extrinsic to human nature. He is against the metaphysical freedom of the will. 35 For him such a freedom is an unmotivated power of choice, that is an arbitrary power to choose for no reason whatever except that the will does choose in this fashion . . . The notion that there is such a power of choosing, having no ground or reason outside of arbitrary choice itself, isolates the moral agent from all social relations. 'Will' on this view is what it is, and acts as it does act, wholly independently of all environing conditions . . . . Although this conclusion follows logically from the premises, few who hold the premises carry the idea to its final conclusion. If social institutions and arrangements are without moral significance then the individual has no moral responsibility with respect to them . . . . No one has any moral ground for trying to bring one system into existence in

31 Ibid., 66.

preference to another. 36

Dewey rejects freedom of indifference, indetermination of choice.
Not uncertainty of volition, but uncertainty of the environment gives 'de-
liberation and choice an opportunity . . . . What we want is possibilities
to open in the world not in the will, except as will or deliberate activity
reflects the world.' Just as he does with his other principles and believes
he treats the possibility of change, of alternative realizations, as an
hypothesis, but he argues for this possibility. Uncertainty, contingency,
novelty, genuine change are empirical facts. "To admit ignorance and un-
certainty in man while denying them to nature involves a curious dualism."
Dewey's freedom means insight as to which of possible alternatives is the
lost with the resultant desire of carrying out this alternative. 37

In its practical and moral sense freedom "is connected with possi-
bility of growth, learning and modification of character, just as is respons-
sibility. The chief reason we do not think of a stone as free is because it
is not capable of changing its mode of conduct as purposely readapting itself
to new conditions." When the dog is trained to new habits by his master,
he is passive under the change, neither initiating nor directing it, and has
no interest in it as such. But a human being becomes interested in learning,
in gaining new attitudes. 38

36 Dewey and Tufts, Ethics, 329, 376; only the section written by
Dewey is used in this investigation.


38 Dewey and Tufts, Ethics, 339.
Dewey describes how choosing occurs in a moral problem. In moral choice there comes first a spontaneous preference in the form of appetite or impulse.

Afterwards there arise situations in which wants compete; we are drawn spontaneously in opposite directions. . . . We hesitate, and then hesitation becomes . . . weighing of values in comparison with each other . . . . At last, a preference emerges which is intentional and which is based on consciousness of the values which deliberation has brought into view. We have to make up our minds. . . which of them we really want. That is choice. We prefer spontaneously, we choose deliberately, knowingly.\textsuperscript{39}

Will, with Dewey, signifies "an active tendency to foresee consequences, to form resolute purposes, and to use all the efforts at command to produce the intended consequences in fact."\textsuperscript{40} Sometimes he says that habit constitutes will\textsuperscript{41} and at other times that habits aid will.\textsuperscript{42} Habit is a change in the organic structure.\textsuperscript{43} It designates "special sensitiveness or accessibility to certain classes of stimuli, standing predilections and aversions, rather than bare recurrence of specific acts."\textsuperscript{44}

\textsuperscript{39} Ibid., 316-317.
\textsuperscript{40} Ibid., 187.
\textsuperscript{41} Dewey, Human Nature and Conduct, 25.
\textsuperscript{43} Dewey, Logic, 31.
\textsuperscript{44} Dewey, Human Nature and Conduct, 42.
Life As Interaction of Organism and Environment

An organism lives by means of an environment through interaction with it. "The processes of living are enacted by the environment as truly as by the organism; for they are an integration." With differentiation of structure the interaction becomes more complex and as a consequence the environment expands. The environment of an animal with locomotion is much larger than that of a plant, because its interaction with the environment is much more complex. As long as the living being remains alive its interaction with the environment is self-maintaining.

The integration between the organism and the environment consists, for the organism, in equilibrium of organic energies and, for the environment, in satisfying conditions. For the higher organism a modification of the environment occurs and there is a change in the organic structure, called a habit, which conditions future behavior.

With the formation and use of symbols by an organism its interaction with the environment becomes intellectual and this organism becomes human. Consequently man's central interaction with the environment becomes inquiry or reflective thinking. Inquiry moves from partial disintegration toward

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46 Ibid., 26.
48 Ibid., 33-34.
reintegration involving change in the human organism and change in the environment. 19

In other words the life of interaction between the organism and the environment is growth and this growth is learning. 20

Cultural Change Brought by Inquiry in Environment

As has been noted experience in the sense of inquiry effects changes in the organism and in the environment. The change in the organism is habit while the change in the environment is not only physical but also cultural. 21

Since man's environment is cultural, it will transform his purely organic behavior into behavior marked with intellectual properties. This transformation is accomplished through the acquisition and understanding of language and proficiency in the arts. 22 Language is itself a cultural institution, but it is also the agency for transmitting other cultural institutions as well as acquired habits, and penetrates the form and content of all culture. 23

Both the rise of habit in man and the change in the cultural environment are aids to conducting subsequent inquiries. While the rise and

19 Ibid., 34.
22 Ibid., 43.
23 Ibid., 45.
use of language was a factor in the evolution of the organism to intellectual behavior, it also gives a new dimension to group association already existing. It is by communication through symbols that culture is transmitted and preserved and conjoined undertakings are engaged in.

Learning As Growth

Life is growth, consequently learning or education is growth. Growth takes place in and through the interaction of the organism with the environment. Human growth is in and through intellectual interaction of inquiry.

Learning does not imply transfer of habits of activity. By spelling words we acquire the ability merely to note the verbal forms, and not the power of observation, attention, and recollection, so that they become usable in other matters. We can apply acquired habits in a wide field of activities if in the process of acquiring the habits we vary the coordinated responses and stimuli. A person may become an expert in mathematics "and be inept and ill-advised... outside of his specialty." His speciality will aid him in a large outside field if he connects it with social matters.

52 Ibid., 56
55 Ibid., 45, 46, 48, 56.
57 Ibid., 170-171, 176.
58 Ibid., 73-79.
and understanding are carried over from one experience to another because these experiences have common elements. The transfer is made possible because by the thinking of inquiry we consciously grasp the common elements. 59

As a person grows through learning he reconstructs and reorganizes experience through inquiry so as to increase the meaning of the experience with the effect that his ability to direct the course of subsequent experience advances. 60

Learning through inquiry results in the acquisition of habits. A habit is a change in the organism so that the organism will act differently to subsequent experience. Abilities may be emotional and intellectual attitudes, basic sensitivities, ways of seeing the various conditions of life. 61

An inferential conclusion "involves a habit (either by way of expressing it or in initiating it)," which is a way of doing. At first the habit operates biologically in the sense that we are not aware of it. Later we become aware of the way of doing, and then we can control what we do. 62 Habit conditions the course of inquiry, and the successful inquiry improves the habit so that we are ready to conduct further inquiries. 63 If the habit engendered by one experience and the change in the environment wrought by that experience carry

59 Dewey, How We Think, 67.
60 Dewey, Democracy and Education, 89-90.
61 Dewey, Experience and Education, 26-27.
62 Ibid., 26, 27, 29-31, 33.
63 Dewey, Logic, 111.
over into the next experience, there is continuity of experience which is necessary for growth.64 Growing through habit means to develop physically, intellectually, morally, and aesthetically.65

Growth is arrested and distorted when experiences engender in the person lack of sensitivity, land him in a rut, make him slack and careless, and do not become linked into a cumulative whole.66 The experience connected with growth is the experience completed and resolved by inquiry. The connection of the change in the human person and the change in the environment in one experience so as to affect subsequent experiences is called interaction. The conditions of the environment interact with the person's needs, desires, purposes, and capacities to bring about the experience which he will have. If there is continuity between two experiences, the understanding and skill which he has acquired in the first experience will become instrumental for dealing effectively with the second experience. He will become a fully integrated personality only "when successive experiences are integrated with one another" and "a world of related objects is constructed."67 For proper growth the principle of the continuity of experience requires that the future be taken into account.68

Learning is social, involving exchange among individuals and also

64 Ibid., 180.
65 Dewey, Experience and Education, 28-29.
66 Ibid., 13-14.
67 Ibid., 41, 38-43.
68 Ibid., 47-48.
social control. However, a person should do his own thinking with his own problem and his own mode of attack, and when he does so he will through his own individuality contribute to the growth of society. In this way learning is in the direction of social efficiency.

This account of learning as growth does not permit learning to be reduced to the reflex arc. According to some psychological theories stimulus and response form a reflex arc. A sample would be: a rabbit acting through light on the eyes of the dog, the visual stimulus; the dog pursuing the rabbit, the response. This account of the situation is, according to Dewey, unacceptable because it over-simplifies the stimulus and response, breaks up the coordinated unity of the two, neglects the end-in-view, forgets possible conflicting reactions, and disregards the interaction of the stimulus and response.

The stimulus is over-simplified. In the laboratory a human subject follows instruction, consequently, the stimulus is a stimulus only in terms of instruction.

Outside the laboratory an object becomes the stimulus only in virtue of what the organism is occupied with and in virtue of its internal conditions and operations. The environmental object does not act in isolation,

69 Dewey, Democracy and Education, 353-357.
70 Ibid., 135-136.
71 Dewey, Philosophy and Civilization, 234-245.
72 Ibid., 252.
but its action depends on what went before it and what accompanies it.

Similarly the reflex arc over-simplifies the response. The immediate reaction to the stimulus is not moving but the excitation-reaction of perceiving. The moving will occur only if certain biological conditions or operations are present. 74

The stimulus and reaction are not two sequential operations as the reflex arc makes them, but form a coordinated unit. 75 During an experience the organism and the environment are in interaction, the reaction being in both. The movement takes place not for itself but for an end-in-view. 76 In the case of the dog seeing the rabbit, the dog, provided he is hungry, will run after the rabbit in order to catch him and eat him.

If we have experienced pleasure in reacting to an object in one way and pain in reacting in another way, the stimulus becomes a doubtful situation. We shall have to make an inquiry to resolve the doubt by choosing what response to make. 77

While the moving takes place the environmental stimulus changes and these changes will in turn change the motion. There is continued interaction between the environment acting as a stimulus and the organism responding to it until the end-in-view is attained. 78

75 Dewey, Philosophy and Civilization, 231-236, 217.
76 Ibid., 236.
77 Ibid., 245-247.
Dewey has his own account of association in the process of learning. Thinking is an existential process through controlled associations. Association as a form of thought means "a connection of objects or their elements in the total situation having a qualitative unity." It is not caused by contiguity or similarity or identity of elements. Contiguity itself can be apprehended only when association is present. Association is an intellectual connection, namely, relevancy of two objects to a situation having a unity of quality. To say that two objects are associated because they are similar is either to offer the fact of association as an explanation or to attribute causal efficacy to 'similarity.' Not identical elements but "unanalyzed quality of the whole accounts for the identification as a result."

Because it is an activity with an aim, learning involves the beginning in terms of acquired habits and attainments of the learner and an end to be achieved. The beginning and end can be gained only through operation, and this requires both interest and discipline: interest in the sense of regarding an operation as means to the end, and in a continuously developing situation and not as isolated factors; and discipline in the sense of "the deliberate or conscious disposition to persist and endure in a planned course of action in spite of difficulties and contrary solicitations."

79 Dewey, Philosophy and Civilization, 106.
80 Ibid., 109-109.
81 Ibid., 109-112.
82 Ibid., 114.
83 Dewey, Democracy and Education, 149-150, 161-162.
In Dewey's account of learning repetition and drill seem to have little place. In school situations he appears to be altogether against drill. In higher organisms, he says, habit and learning are not brought about by repetition, but by instituting effective interaction between the organism and the environment.

Meaning of Experience

From the foregoing account of conscious acts it becomes evident that for Dewey the word "experience" covers much more than the activities which are termed conscious. In his viewpoint "the structure of consciousness lies in a highly complex field outside of 'consciousness'."55 Dewey calls attention to Dewey's use of the word experience.

"Consciousness . . . is only a very small and shifting portion of experience. In the experience . . . are all the physical features of the environment, extending out in space . . . and . . . time, and the habits and interests . . . of the organism . . . [The word 'experience'] means just an immense and operative world of diverse and interacting elements."56 Experience, thus conceived, is the criterion of reality. Such realities as knowledge and consciousness, selves and not-selves, are in experience and are parts of experience, not the whole nor the most important aspect of it. Experience "is the entire organic agent-patient in all its interaction with the environment, natural and social . . . Experiencing is just certain modes of interaction, or correlation of natural objects among which the organism happens, so to say, to be one."57 . . . Experience, existence, change, time, real interaction

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54 Dewey, Logic, 105.
55 Dewey, Philosophy and Civilization, 251.
56 Dewey, Essays in Experimental Logic, 6-7.
between agents and patients, both personal and impersonal, are always found together.\textsuperscript{16} Even habits are cosmic, being "the total order of things expressed in one way."\textsuperscript{18}

This extended meaning of experience is necessitated by the development of the mental acts up to the intellectual ones through the evolutionary process from the biological operations as interactions between the organism and the environment to enable the organism to adapt itself to the environment in its possibilities by changing itself and the environment. Dewey constantly emphasizes that reflective thinking is an interaction between the organism and the environment and compares it with physical interactions. In this way he thinks there is no place for mental faculties or states.\textsuperscript{19} Yet in spite of his interaction idea he does declare: "Knowing does not do anything to the existential object known."\textsuperscript{20}

\textbf{Dewey's Psychology Organismic}

Dewey claims to be a behaviorist, giving the following account of his behaviorism. Behavior is an interaction occurring "at a distance through


\textsuperscript{19} Dewey, \textit{Logic}, 12, 21, 30.

a number of intervening links" with environing conditions; in this interaction
other accultural human beings are involved, "including even persons at a great
distance in space and time, because of what they have done in making the di-
rect environment what it is .... For although distant conditions are not
present in persona propria, they are present through their effects."92 He
claims to be behavioristic by being empirical. According to him the word
empirical has reference "to origin and development of scientific statements
out of concrete experiences,"93 to the public accessibility of the inquiry
and its openness to observation, and to the connection of the scientific con-
clusions with reasoning with and out of principles.94

Analysis of Dewey's psychological ideas reveals in what sense he is
behavioristic. Certainly he is behavioristic in so far as he rejects a mind
or intelligence in the sense of an existential power, in so far as he does
not admit mental states between the organism and the environment in their in-
teraction or transaction of conscious or mental acts. He is behavioristic in
so far as he defends the continuity of the mental operations with the biolog-
ical operations.

Dewey rejects some of the behavioristic principles. He does not
identify the mental operations with the biological ones. He does not reduce

92 Dewey, "Experience, Knowledge and Value: a Rejoinder,"
Philosophy of John Dewey, ed. Schilpp, 955.

93 Dewey, Problems of Men, 217; Logic, 9, 37.

94 Dewey, Logic, 39, 37.
mental action or learning to stimuli and response of movement or secretion. He does not make consciousness an epi-phenomenon.95 We have already seen how he emphasizes the difference of the mental operations from the biological ones, although he does not indicate in what this difference exactly consists.

According to Kilpatrick, Dewey's idea that life is the interaction of the organism with the environment makes his psychological outlook organismic.96 The reduction of learning to growth does the same. His followers show a preference for an organismic psychology.97

95 Dewey, Philosophy and Civilization, 269-270, 309.
CHAPTER VI

SOCIAL DEMOCRACY

The social dominates Dewey's education and philosophy. Education is growing socially through having experience in a social manner. Science, arts, trades—all culture—are social achievements. The resolutions of problems through the scientific method are tested socially. Moral right, duty, obligation, responsibility arise through interaction with the social environment. The criterion for what is morally good is the common good socially approved.

Inquiry Social

When inquiry developed from the organic environmental interaction and integration through the formulation and use of symbols, the association of organisms became social and the environment became cultural. Inquiry, language, society, culture, all rose at the same time in mutual interdependence. Inquiry is socially conditioned. Language in a large measure perpetuates the cultural results of inquiries and makes possible their public consideration. It "is the medium in which culture exists and through which

2 Ibid., 19.
it is transmitted." Thus language itself is social.\(^3\)

while it is true that inquiries are carried on by particular individuals in so far as the acts of reasoning and inference are concerned, they are social in so far as the outcome must be accepted by society. When other persons consider a completed inquiry they must arrive at identically the same conclusion in reasoning and in inferring.\(^4\) In other words the outcomes of inquiry are tested socially.

Language Social

Language in the wide sense includes speech, writings, gestures, rites, ceremonies, monuments, and products of industrial and fine arts.\(^5\) They are all symbols. Tools and machines are modes of language, revealing many things about the society which uses them.

Through language ideas or meanings are consummated, leading to communal action.\(^6\) Language used for enjoyment or for aesthetic purposes by hearing or reading stories, narrations, scientific accounts, or art reports involves the building up of the events, facts, pictures, or original data into unity.\(^7\) While in these circumstances the connection with operations is indirect, attitudes are developed to respond in certain ways when conditions

\(^3\) Ibid., 19-20.
\(^4\) Ibid., 44.
\(^5\) Ibid., 66.
\(^6\) Ibid., 48.
\(^7\) Ibid.
which have occurred imaginatively come to pass really. In other words hearing and reading is a preparation for action in the future. Language has, therefore, meaning either for the present or for future action. 8

Ordinary language has its form because of group activities and interests, customs and institutions. It developed spontaneously. Its meanings are coarse. The meanings are not related to one another in a consistent and organised way. The same word has various meanings. The language of science, however, has its meanings through inquiry and each meaning is expressly determined in relation to other meanings. Both the language of ordinary life and the language of science are social, and only as social have they value. Thus language conditions the development of culture and is a product of it. Inquiry is the reason for both facts.

Culture Social

When the interaction between the organism and the environment becomes social, inquiry for the adjustment of the organism and the environment to each other brings about existential changes in both. The change in the environment is cultural. But the problem which initiated the inquiry grew out of social relations, and the organs for dealing with this developed out of social living. The cultural change is therefore social. 10

8 Ibid., 48-49.
9 Ibid., 49-51.
10 Ibid., 42, 487-489.
Democracy Ideal Social Organization

The society judged by Dewey as the most desirable at the present time is democracy. He said that Jefferson was the first modern to state in human terms the principles of democracy... "These truths are self-evident: that all men are created equal; that they are endowed by their Creator with inherent and unalienable rights; that among these are life, liberty and the pursuit of happiness."

Then he followed with the remark:

Today we are wary of anything purporting to be self-evident truths; we are not given to associating politics with the plans of the Creator; the doctrine of natural rights which governed his style of expression has been weakened by historic and by philosophic criticism.11

While democracy includes political form and government and activities as means to realize its own ends it goes beyond them. It is founded upon faith in human nature and intelligence and social cooperation. It implies that all its members should have equal treatment by the law and government, and be accorded equal opportunity for developing their capacities, each person contributing to the common welfare according to his ability. It involves freedom of intelligence, while for freedom of intelligence it needs freedom of action and experience.12 It requires "a just and equal morality."13

Dewey wants democracy to be regarded as a way of life and as much to be made the basis of morality. "We have advanced far enough to say that

democracy is a way of life. We have yet to realize that it is a way of personal life and one which provides a moral standard for personal conduct. 14

The Common Good As the Criterion for Democracy

In his Ethics Dewey undertakes to develop a criterion of morality, explaining that it should be done through inquiry. The criterion should be a generalization from the experience of the past... stated in such a way that it will apply to changed conditions of the present and future... and will point out the direction in which efforts at change and betterment should move... The generalization should be a hypothesis... to be tried and tested, confirmed and revised in future practice; having a constant point of growth instead of being closed. 15

Through this method Dewey arrives "at the conclusion that the effect of acts upon the common welfare, the general well-being, is the criterion for judging the moral worth of personal acts and dispositions." 16 Since this is so in morals Dewey thinks that the general well-being can be presumed to be the criterion for social institutions and for plans of social change. Common good involves sharing of goods. "Each contributes something distinctive from his own store of knowledge, ability, taste, while receiving at the same time elements of value contributed by others." 17

The individuals attain the common good when they develop their distinctive personalities, not working at the expense of their own active growth for "some allured vague larger good under the idea that it is 'social';"

14 Ibid.
15 Dewey and Tufts, Ethics, 361.
16 Ibid., 362.
17 Ibid., 362, 363.
and when they with "initiative, independence of judgment, flexibility, fullness of experience . . . enrich the lives of other." For society to achieve the common welfare there must be "cooperation in place of coercion, voluntary sharing in a process of mutual give and take, instead of authority imposed from above."16

Democracy as an ideal "expresses the need for progress beyond anything yet attained," assuring to all individuals their full development and "a share in both the values they contribute and those they receive." It tries "to unite two ideas: . . . liberation of individuals on one hand and promotion of a common good on the other."19

"In customary morality," continues Dewey, "it is possible to draw up a list or catalogue of vices and virtues," the latter reflecting some definite existing emotion, the former a deviation or violation of it. "In reflective morality, a list of virtues has a much more tentative status," since the virtues express "an interest in objects and institutions which are changing," definable "only on the basis of qualities characteristic of interest."20 Virtue is a wholehearted, persistent, impartial interest in approved objects. All virtues are one, virtuous traits interpenetrating one another.21

16 Ibid., 386, 385.
19 Ibid., 387-386.
20 Ibid., 280, 281.
21 Ibid., 281-283.
Freedom of Inquiry

In a democratic organization freedom to think, inquire, discuss is central in a group of rights, "because the essence of the democratic principle is appeal to voluntary disposition instead of to force, to persuasion instead of coercion."\(^{22}\)

Method and results of inquiry should be made public through the press, books, lectures. The results of discussions and the progress of new inquiries should be freely communicated. In this way the inquiries are socially conducted and they are integrated into the affairs of ordinary life. "It is a commonplace that many an ordinary man today is in possession of knowledge and ideas which the wisest men of antiquity were unacquainted with. Cultural material is now incarnate in the environment and even a low intelligence can appropriate it."\(^{23}\)

Economic Problem

The common welfare must not be regarded as having a fixed meaning. "The conditions and the concrete significance of liberty, of equality, of mutual respect, and reciprocal service, change from generation to generation, in some degree from year to year."\(^{24}\) Along with these changes political

\(^{22}\) Ibid., 396, 399, loc.  
\(^{23}\) Ibid., loc., loc.  
\(^{24}\) Ibid., 362, 369.
organization must also be modified. "Most political issues of the present
arise out of economic conditions; they have to do with the distribution of
wealth and income, the ownership and control of property." 25

"We have entered the collective age. Because of the special meanings
attached to the terms, contends Dewey, neither "socialism" nor "collectivism"
correctly designates it. "Perhaps the constantly increasing role of corpora-
tions in our economic life gives a clue to a fitting name. . . . The need of
the present is to apprehend the fact that, for better or worse, we are living
in a corporate age." 26

In the corporate economic organization individuals, including the
captains of industry, are submerged. To correct this evil, three things are
necessary.

The first . . . is the guarantee of the right, to every individual who
is capable of it, to work; . . . and if the ordinary economic machinery
breaks down, . . . then it is the duty of the state to . . . see that
individuals have something to do that is worth-while . . . . In the
second place, /Intelligent administration should/ be used to raise and
maintain on a higher level the general standard and scale of living. . . .
The third phase . . . is the need of securing . . a greater ability on
the part of the workers . . . to control industry." 27

A vital problem is to get the laborers to work not only with their
hands but also with their mind and hearts. Industry itself will have to be-
come the educative and cultural force within the industrial cultural society

25 Ibid., 396, 396, 397.

26 Dewey, Individualism Old and New, 36, 49.

27 Dewey, "Economic Fails of the New Society," in Intelligence in
the Modern World, ed. Ratner, 420-422. This article was written especially
for the volume.
by inculcating the use of the scientific inquiry. Through scientific inquiry
all individuals would share in the discoveries of others to the enrichment of
their own experience.28

The problem today remains one of using available intelligence, of
employing the immense resources science has put at our disposal: a
pooled and coordinated social intelligence, not the mere scattered individ-
ualized intelligence of persons here and there, however high their I. Q.'s
may be . . . . Social control affected through organized application of
social intelligence is the sole form of social control that can and will
set rid of existing evils without landing us finally in some form of
earpire control from above and outside.29

Class war cannot be a means of eliminating class conflict and of
making genuine social advance. The use of violence will only result in chaos.
The method which can have success is the method of intelligent action through
inquiry.30

There seems to be two possible courses to economic development. We
shall have either a fluid, chaotic and unplanned business determinism for
profit or the determinism of a socially planned and ordered economic organi-
sation, public socialism.31

29 Dewey, "Economic Basis of the New Society," in Intelligence
30 John Dewey, "Why I am Not a Communist," Modern Monthly, VIII,
April, 1931, 135-137, in The Meaning of Marx, a Symposium, by Bertrand
Russell et al, New York, 1932, 55-56.
31 Dewey, "Experience, Knowledge and Values: a Rejoinder," in
Philosophy of John Dewey, ed Schilpp, 593.
32 Dewey, Individualism Old and New, 119-120.
Social Authority Modeled on Scientific Inquiry

A social organization needs to have authority. History shows that every political authority so far used has failed to meet the problems of our complex society without interfering with freedom. Christian philosophers of the Middle Ages said that the ultimate social authority is in the Author of nature and in the Redeemer of mankind, its earthly representative and interpreter and agent being the divinely instituted and constituted Church. At the present, conditions indicate that the scientific method should be set up as the political authority. This would give us collective authority and freedom. Authority, says Dewey, "stands for stability of social organization by means of which direction and support are given to individuals; while individual freedom stands for the forces by which change is intentionally brought about."33

That the scientific method is peculiarly adapted to function as a political authority is evident from the manner in which the scientists have used it collectively.

Science has made its way by releasing, not by suppressing, the elements of variation, of invention and innovation, of novel creation in individuals. It is as true of the history of modern science as it is of the history of painting or music that its advances have been initiated by individuals who freed themselves from the bonds of tradition and custom whenever they found the latter hampering their own powers of reflection, observation, and construction.

Since these constructions are cooperatively verified and developed, "the

33 Dewey, Problems of Men, 94.
authority of science issues from and is based upon collective activity cooperatively organized."34 The use of the method of science as the political authority will make the government democratic in its operations. For democracy means that every individual must be consulted in such a way, actively not passively, that he himself becomes a part of the process of authority, of the process of social control; that his needs and wants have a chance to be registered in a way where they count in determining social policy.35

World Unity

In principle Dewey was in favor of all the nations establishing a world organization among themselves. But they would have to form it in relation to problems and for the purpose of solving these problems. In other words they would have to proceed through the reflective thinking of inquiry.

An organization of nations which grew out of common everyday necessities, and which operated to meet the commonplace needs of everyday life with respect to food, labor, securing raw materials for the reparation of a devastated world, and so on—an organization which grew out of wants and met them would, once formed, become so indispensable that speedily no one could imagine the world getting on without it. It would go of itself; it would possess the only final sanction of any human institution—satisfaction of acknowledged needs and furtherance of urgent interests. It would generate in time any legal and political formulations and mechanisms which were needed to take care of the controversies and conflicts of interest that would still arise.36

Such an organization would be based on the growth of the community of interests and purposes among nations. Our own country is held together


36 John Dewey, "The Approach to a League of Nations," The Dial,
not by police force but by community of interests and sympathy, the laws either having become customs or having been accepted, the use of force being merely incidental. 37

Dewey became enthusiastic over the idealism of Wilson during the first world war and promoted our participating in the war. 38 He was greatly disappointed when the political leaders of our allies opposed Wilson's war and peace aims. 39 He condemned the Treaty of Versailles and was against the League of Nations because it was politically formed and was a league of governments. 40 He criticized the use of international force and war for the purpose of eliminating war. 41

Because of his experience in the first world war he was totally against ever entering the second world war. 42 For a considerable time he did not favor the United Nations, because it was politically conceived. He


40 John Dewey, "Shall We Join the League?" New Republic, XXXIV, March 26, 1923, 139-140.


thought an organization which grew out of an institution which provided the people of the world with food and other needed things would be workable. "If history has proved anything, it is, I believe that only such kind of organization is so 'vital and dynamic' as to endure." 43

In his 1946 introduction to The Public and Its Problems he recognized "that relations between nations are taking on the properties that constitute a public, and hence call for some measure of political organization." But Dewey wasn't sure whether this political authority should consist in the strictest construction of the code for the United Nations or in an altered code for a World Federation with wider political authority. 44

Now more than ever, he states emphatically, it is necessary to maintain the struggle for democracy in all phases of culture, political, economic, international, scientific, artistic, educational, religious.

An American democracy can serve the world only as it demonstrates in the conduct of its own life the efficacy of plural, partial, and experimental methods in securing and maintaining an ever-increasing release of the powers of human nature, in service of freedom which is co-operative and a co-operation which is voluntary. 45


45 Dewey, Freedom and Culture, 176.
CHAPTER VII

DEWEY'S METAPHYSICAL IDEAS CONCERNING THE WORLD

According to Piatt, Dewey's philosophy begins and ends in logical theory as the method inquiry.¹ His philosophic ideas are conditioned by two principles: the nature of inquiry as an interaction between the organism and the environment, and the development of reflective thinking or of inquiry from the biological operations.

Cosmos as Transaction of Knowings and Knowns

Inquiry or thinking developed from the biological operations in the integration of the organism with the objects of the environment when the organism had become so complex that it needed to adjust itself to the environment in relation to the future.² Inquiry and reflective thinking or thought are identical.³ Reflective thinking whether as informal inquiry of common sense or formal inquiry of science is an integrated interaction between the organism and the objects of the environment.⁴

³ Ibid., 21.
⁴ Ibid., 33-35, 114.

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The interaction is to be understood as mutual and reciprocal action between the organism and environment. Because the word interaction can have other meanings than mutual reciprocal action, Dewey chose the term transaction to designate the mutual and reciprocal action between the organism and the environment.

Primitively things were regarded as self-acting, "as acting under their own powers." Up to the beginning of the last generation, they were looked upon as interacting, one thing balancing another in causal interaction. At the present time Dewey views things in transaction as a growing sense of observation of high efficiency, describing and naming aspects and phases of action without final attribution to detachable "elements" or "essences", and without isolating presumptively detachable "relations" from detachable "elements."

Inquiry is a transaction of the organism and the environment, of the knowing and the known. The organism and the environment or the knowing and the known are aspects of one event, "twin aspects of common fact."

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5 Ibid., 23, 32.


7 Ibid., 107-108, 103-104, 114-119.

8 Ibid., 86.

9 Ibid., 53.
"The observable extensions of the knowings and the knowns run across the inhabited surface of the earth; the observable durations run across culture, backward into pre-history, forward into the future—all as subject matters of inquiry." While it is legitimate to examine the knowing and the known separately, they must be considered in their mutual and reciprocal relationship. They are not to be regarded as a subject and object.

The knowing and the known are always inseparable. While there is a natural world which exists independently of the environment, it becomes an environment only when it directly or indirectly enters the affairs of life. "The organism is itself a part of the larger natural world and exists as organism only in active connections with its environment."

What is beyond the knowing and the known is not worth our concern. A real world that has no knower to know has in relation to inquiry no claim to reality, and a knowing or a knower that has no world to know has less claim to reality. However, we accept as real, not as superior, the geologic and


11 Dewey, Logic, 120.

12 Ibid., 53.


14 Ibid., 33-34.

15 Dewey and Bentley, Knowing and the Known, 74.

16 Ibid., 136.
cosmic world prior to man's appearance in it, since it enters indirectly into man's life. 17

As it comes to be known through inquiry, the cosmos is composed of facts. 16 Not only the knowns but also the knowings are facts, for the knowings are known. 19 The fact named as taking place is Event, while the entire activity of naming through which event appears in our knowings as Fact is Designation. 20 Event is extensional and durational. 21 Fact is applied to the cosmos both in regard to its naming-knowing aspect, Event, and to its named-known aspect, Designation. 22 Fact-Event-Designation form one system. 23 A Fact is said to be existing after it has been transactionally inspected through inquiry. 24

17 Ibid., 136.
18 Ibid., 72, 53.
19 Ibid., 59, 50.
20 Ibid., 60–61.
21 Ibid., 60.
22 Ibid., 119.
23 Ibid., 60.
24 Ibid., 293.
Nature of Knowings and Knowns

Knowings and the knowns are things, are components of the cosmos, are facts, are events.25 To be in action and to be a thing are identical.26 There is no object or entity or reality or vital principle as ever against doing or acting.27 The existence of a mind to do the thinking is untenable and the study of the organism does not reveal its existence.28 In between the organism and the objects of the environment there is neither a psychological nor a logical world in the form of thoughts, meanings, judgments and a world of words in the form of words, terms, sentences.29 Knowings, indeed all behaviors, are organic-environmental events.30 They form a system, and are therefore extensional and durational and as such transactional.31 They are observable.32

There are no substances, no essences.33 Things are events and not

26 Dewey and Bentley, Knowing and the Known, 123.
27 Ibid., 91, 93, 121, 293.
28 Ibid., 63-65, 96, 120.
29 Ibid., 56, 63, 120-121.
30 Ibid., 81.
31 Ibid., 66-68, 93, 95.
32 Ibid., 87.
33 Dewey, Logic, 127; Dewey and Bentley, Knowing and the Known, 130, 303.
Scientific objects are objects of thought of reality and not immanent properties of real substances. Substance is a logical and not an ontological determination. It is present when a variety of qualifications "hang together as dependable signs that certain consequences will follow when certain interactions take place."

Identity and Contradiction Non-Ontological

The canons of identity and contradiction are not ontological, they do not apply to the things or facts in the world. They express certain conditions to be satisfied by the inquiry interaction or transaction between the organism and the environment so that it may be successful. They are not even properties of propositions. The canon of identity is "the proper form in which a proposition having a scientific status should be stated." The same is true of the principle of contradiction. However, direct inspection of propositions will not reveal whether they are contradictory of each other. As a matter of fact, Dewey uses contradiction as directly observed and as ontologically related to things. He says, "It would be contradiction if I attempted to demonstrate by means of a discourse the existence of universes
of experience. At another time after referring to the continuity of the natural and social sciences which have ontological reference, he remarks, "if that is to be termed a hypothesis which cannot be denied without self-contradiction."

**Cause Non-Ontological**

Science has found that a cause in the sense of a producing force outside of events is unscientific. On the basis of causality being ontological, everything in the cosmos would be the cause of everything. Nor is cause as an invariable antecedent ontological, for there are no uniform sequences of events. Through inquiry events experienced as separate are regarded to be causally linked and when they are successfully connected in the same event the cause concept drops out. The category of cause is a logical form. But it is not arbitrary, for only through its use can an antecedent existential subject matter be transformed from a problematic into

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39 Ibid., 69.
42 Ibid., 459.
43 Ibid., 450-451.
44 Ibid., 665-667.
a resolved situation.\textsuperscript{46} Cause is a means-consequence relation.\textsuperscript{47}

Continuity Among Things

Thought or inquiry in its informal nature originated from the biological operations in the course of the organism's evolution. Consequently there is continuity between the lower and higher forms of things and activities; while they are not identical, they are not specifically different.\textsuperscript{48}

Matter is not an event or existent.\textsuperscript{49} Since matter involves a metaphysical theory of substances, the world cannot be said to be material.\textsuperscript{50} In the physical sciences matter designates "something capable of being expressed in mathematical symbols." In philosophy it could be used as the term "for existential conditions in their functions as conditions of all special forms of socio-biotic activities and values."\textsuperscript{51}

Mind, faculty, I. Q., or brain is not in active charge of behavior. There is no person "residing in or at or near the organism . . . to do the knowing."\textsuperscript{52} It is enough to have the living, behaving, knowing organism.\textsuperscript{53}

\begin{itemize}
\item \textsuperscript{46} Ibid., 459-460.
\item \textsuperscript{47} Ibid., 460, 461.
\item \textsuperscript{48} Ibid., 23-33.
\item \textsuperscript{49} Dewey, \textit{Experience and Nature}, 262.
\item \textsuperscript{50} Dewey, "Experience, Knowledge and Value: A Rejoinder," \textit{Philosophy of John Dewey}, ed. Schilpp, 60h.
\item \textsuperscript{51} Ibid., 60h, 605.
\item \textsuperscript{52} Dewey and Bentley, \textit{Knowing and the Known}, 132, 13h.
\item \textsuperscript{53} Ibid., 132.
\end{itemize}
Man is an organized unity of the interactive processes in the brain, glands, muscles, viscera, heart, and other physical parts. "We cannot be scientific, save as we seek for the physiological, the physical factor in every emotional, intellectual and volitional experience." 54

Since thinking or knowing consists of transaction between the organism and the environment, Dewey should allow the name of potentiality for mind or for intellect or for any ability as he does for the possibility of change in the organism and objects of environment. 55

"The distinction between physical, psycho-physical, and mental is ... one of levels of increasing complexity and intimacy of interaction among natural events." The characteristics of each level are descriptive categories and not explanatory categories, not the operation of forces as causes. 56

"Organization is so characteristic of the nature of some events in their sequential linkages that no theory about it can be as speculative or absurd as those which ignore or deny its genuine existence." 57

The animate plants do not differ from the inanimate things in that they have "something in addition to physico-chemical energy"; but rather in that the plant shows a bias to such selective reactions as to remain plant,


55 Dewey, Logic, 107, 129.


57 Ibid., 255.
while the inanimate iron, for example, exhibits no such bias in reacting with water to remain iron. 58

Psycho-physical means the acquisition by the physical organism of "additional properties, those of ability to procure a peculiar kind of interactive support of needs from surrounding media." There is no call for a "special force or entity called life or soul." 59

Human psychology differs from animal psychology by the fact that a human person is transformed "by intercourse and association with other persons and groups of persons." To a bull, 'red' is purely physiological stimulus. To a human person, it has its significance in terms of his adaptation to other persons. But this adaptation needs language. "Without language, the qualities of organic action that are feelings are pains, pleasure, odors, noises, tones, only potentially and prophetically. With language they are discriminated and identified, . . . 'objectified'; they are immediate traits of things." 60

Life is a process of activity which involves environment. An organism lives by the objects of the environment. "The processes of living are as truly enacted by the environment as by the organism; for they are an integration." Doubt, belief, ideas, consequences of inquiry are just as

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58 Ibid., 253-254.
59 Ibid., 255.
referred to the environment as they are to the organism; they are behavior in which the knower and the known interact or transact.\textsuperscript{61}

The organism and its environmental objects or the knowing and the knowns form a common system and cannot be regarded as separate existences. Forms and activities in the cosmos are identical. Knowings are behaviors and knowns are behaviors.\textsuperscript{62}

\textbf{Prevalence of Change}

Every thing in the cosmos has an irreducible brute itselfness about it, but it is also connected and associated with other things. Without this association things could neither exist nor be conceived.\textsuperscript{63} The adequacy of a philosophy is conditioned by "taking things in the widest and most complex scale of associations open to observation."\textsuperscript{64}

While determinate, things are at the same time problematic—having potentialities of change in various directions.\textsuperscript{65} The world itself is marked by contingencies which need to be determined and which leave room for potentialities not yet reached.\textsuperscript{66} The doubt, confusions, indeterminateness in the

\textsuperscript{61} Dewey, Logic, 25, 33.

\textsuperscript{62} Dewey and Bentley, Knowing and the Known, 123, 296-297.


\textsuperscript{64} John Dewey, "The Social," Philosophy and Civilization, 76.

\textsuperscript{65} Dewey, Experience and Nature, 70-71.

\textsuperscript{66} Dewey, "Experience, Knowledge and Value: a Rejoinder,"
macroscopic experience which occasions the inquiry is not only in the organism but also in the objects of the environment. "We are doubtful because the situation is inherently doubtful." This is another instance of Dewey equating the organism and the environment. This is necessary because doubt, confusion, indeterminateness are transactions of the organism and the objects of the environment. The organism and the objects of the environment are facts or events of the cosmos only in their transaction of knowing and knowns.

Since the objects of the environment are indeterminate and confused, the outcome is uncertain. The inquiry itself must reveal what changes must be made in the organism and the environment in order to make the indetermination in both determinate.

Dewey speaks of observed facts being potentialities, or possessing potentialities, or "being a set of qualities treated as potentialities for specified existential consequences." Potentialities are existential powers that are actualized under given conditions of existential interaction. Possibility is the idea of an operability which is actualized when the operation

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Philosophy of John Dewey, ed. Schilpp, 606; Experience and Nature, 11, 63.

68 Dewey and Bentley, Knowing and the Known, 127, 294, 296, 297, 304.
70 Ibid., 106-107, 117-118.
71 Ibid., 206, 107, 129.
is performed on existence. Conditions of the present are potentialities of the future. What is potential at one time may become actualized at another time either by the mere change of circumstantial conditions as water freezing through a change in temperature or through a deliberate operation in inquiry.

The actualization of potentiality may require such a complex condition that it must take a long time. The actual rate of change of some things is so slow and rhythmic that the things seem to be stable among more transitory and irregular happenings. All action in the world is connected with reaction; this fact excludes anything absolutely stable and unchangeable.

Morality an Affair of Knowings and Knowns

"Morality depends upon events, not upon commands and ideals alien to nature." The child is "subject to demands from a parent which . . . issue from the very nature of family life. . . . So friends owe something to one another because of the very nature of the friendly relations." Citizens

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72 Ibid., 269.
73 Ibid., 239.
74 Ibid., 288-289.
respond to the demands of their organized state even at their personal inconvenience because they are members of it. Evidently then "right, law, duty, arise from the relations which human beings intimately sustain to one another, and . . . their authoritative force springs from the very nature of the relation that binds people together."\(^76\)

These relationships among human persons are those of interdependence. Everyone receives his being from others and through their aid grows physically and intellectually and morally. While he gradually becomes more and more independent physically and economically in the process of maturation he always remains really dependent. He "can carry on his calling only through cooperation and competition with others; he has needs which are satisfied only through exchange of services and commodities." He can enjoy recreations and make achievements only by "sharing with others." When he is alone "he thinks with language that is derived from association with others, and thinks about questions and issues that have been born in intercourse." Of no person are "independent inquiry, reflection, and insight . . . more characteristic than \(^77\)the genuine scientific and philosophic thinker." But even "he thinks upon problems which have originated in a long tradition, and . . . he intends to share his conclusions with others, so as to win their assent or elicit their corrections."\(^79\)

Since moral judgment and moral responsibility are wrought in us by

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\(^76\) Dewey and Tufts, \textit{Ethics}, 236-238.

\(^79\) Ibid., 247, 248.
the social environment, "all morality is social." If a man lived alone in
the world the question, "Why be moral?" would never arise. Thus Dewey wrote
before 1922. Later he accepted individual morality. The advent of social
morality
does not signify that morality becomes impersonal and collective; it
remains and must remain personal in that social problems have to be faced
by individuals, and decisions reached in the form of individual minds
have to be carried into effect by individual agents, who are in turn
personally responsible for the consequences of their acts. . . . Such
facts as these, however, are wholly consistent with the fact that what
men think and believe is affected by common factors, and that the thought
and choice of one individual spreads to others. . . . All morality (in-
cluding immorality) is both individual and social: —individual in its
immediate inception and execution, in the desires, choices, dispositions
from which conduct proceeds; social in its occasions, material, and
consequences.61

Morality arises in situations involving alternate possibilities.
Consequently, the best is the discovered good. What is regarded as evil was
before its rejection "a competing good. After rejection, it figures . . .
as the bad of that situation."62

It is necessary to have a criterion to judge the morality of social
conditions. This criterion should be reached experimentally and be used in
the experimental spirit as an hypothesis.63 Through this method Dewey arrives
"at the conclusion that the effect of acts upon the common welfare, the general
well-being, is the criterion for judging the moral worth of personal acts

60 Dewey, Human Nature and Conduct, 316, 326.
61 Dewey and Tufts, Ethics, 350-353, 351, 363.
63 Dewey and Tufts, Ethics, 361.
and dispositions."\textsuperscript{64}

The ideal values are those which "are approved by reflection after wide examination of their relations."\textsuperscript{65} Such are "goods" of science, art, culture, interchange of knowledge and ideas. However occasions arise "when attention to the material environment constitutes the ideal good because that is the act which thoroughgoing inquiry would approve."\textsuperscript{66}

At first the child is conscious of specific duties toward his father and mother, brothers and sisters. But with increasing moral maturity, he develops a "generalized sense of Duty" as a "standard to which he must bring up particular cases" and which "is a support in time of temptation."\textsuperscript{67}

Moral generalizations which are made from resembling experiences may through language, instruction, and tradition become extended throughout a whole people, and by means of intercommunication be adopted to some extent by the entire human race. Such moral generalizations are moral principles. They

are of great use in surveying particular cases. But as they are transmitted from one generation to another, they tend to become fixed and rigid. Their origin in experience is forgotten and so is their proper use in further experience. . . . They become prescriptions, rules.\textsuperscript{68}

\textsuperscript{64} Ibid., 362; Moral and Spiritual Values in Public Schools, Educational Policies Commission, National Educational Association, Washington, D.C. 1951; Education for a World Society, Eleventh Yearbook of the John Dewey Society, ed. Christian C. Arnott and Samuel Everett, New York, 1951, 47.

\textsuperscript{65} Dewey and Tufts, Ethics, 229

\textsuperscript{66} Ibid., 230.

\textsuperscript{67} Ibid., 253-254.

\textsuperscript{68} Ibid., 304.
As the child becomes conscious of the moral import of action through others in terms of social demand and approval and condemnation, he becomes conscious of his responsibility and freedom. Responsibility consists in approval or reprobation not retrospectively but prospectively. A person is held accountable for what he did so that by acting differently in the future he may make himself into a person who will be inclined to act in this way. “The fact that each act tends to form, through habit, a self which will perform a certain kind of acts, is the foundation, theoretically and practically, of responsibility.”

While practically all moralists have distinguished within the self between the lower and the higher, the carnal and the spiritual, the animal and the truly human, the sensuous and the rational selves; actually, continues Dewey, there is only the distinction between the old attained and the new moving self. When a person takes the step to change from bad to good habits he enters into an experience of freedom. If we state the moral law as the injunction to each self on every possible occasion to identify the self with a new growth that is possible, then obedience to law is one with moral freedom.

Our present society through religion and other sources is the heir of a great idealistic tradition: “love of neighbor, exact equity, kindliness of action and judgment.” But in reality there prevail ruthless competition

89 Ibid., 331, 336, 337, 339, 338.
80 Ibid., 336, 342.
and private gain in business, exclusiveness in national life, standards of valuation in class and color in the world. Our idealistic traditions "cannot be made good in practice except as they are extended to include the remaking of the social environment, economic, political, international." 91

Particular rights, duties, obligations change with changes in society. Life is in the process of change in countless ways so that "the customary loyalties that once held men together and made them aware of their reciprocal obligations have been sapped." As a consequence there occurs a shift in the field of rights and duties.

That which is regarded as anti-social and immoral at one time is hailed later on as the beginning of great and beneficent social reform... Organizations that were punished as conspiracies by despotic governments have been regarded as the authors of a glorious liberty after their work had succeeded. 92

Because of these facts it becomes necessary "to develop new stable relationships in society out of which duties and loyalties will naturally grow." 93 "Every condition of life as it moves toward coherent organization develops its own ethos, its own standards and codes." 94

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91 Ibid., 265-266.
92 Ibid., 249, 256, 363.
93 Ibid., 256.
Values

Value in terms of good-bad, true-false, beautiful-ugly, pervades human life experiences. The field of value extends over all events of life processes, physical and animal, and over the human operations irreducible to physiological terms, such as language, the life processes being restricted to those of selection-rejection in order to maintain all life processes as a going concern.95

In our life value occurs either by way of valuing or valuing, esteeming or estimating.96 We esteem by spontaneous acts of liking, prizing, admiring, approving a person or an object or a scene. We estimate by reflectively judging, as the outcome of inquiry, whether the person or thing or scene is worthy of being esteemed.97 Maturation is accompanied by the change from esteeming to estimating.98

Valuation is provoked in relation to a situation which is "indeterminate in respect to what might and should be done" or in respect to its enjoyment.99 The inquirer cannot logically change his beliefs or mental

97 Dewey and Tufts, Ethics, 290-291.
states except in so far as he modifies the objective matter through "existential operations, rooted ultimately in organic activities." In regard to the ordinary and occupational affairs of life everyone deliberates concerning what to make or do, what is better to do next. The scientist is also occupied in his inquiry with practical factors: what research to select; how to carry it on; what to do to ground his conclusion, no matter how abstract or theoretical it may be.\footnote{Dewey, Logic, 173-174, 160, 159, 161.}

A proposed solution in valuation cannot be decided on the basis of some absolute end-value but only through scientific inquiry.\footnote{Dewey, Theory of Valuation, 48.} The acceptance of ultimate ends, holds Dewey, is bound to play into the hands of external authorities. The prizings which emanate from economic or political or ecclesiastical authority tend to indicate that rational valuation is impossible. There are no ultimate ends, ends-in-themselves.\footnote{Dewey, "The Field of 'Value'," Value, ed. Lepley, 71, 74, 75.}

Since valuation has its source not only in biological modes of behavior but also in culture, there is no separation between the "world of fact" and the "realm of values."\footnote{Dewey, Theory of Valuation, ch.} The abstract concept of truth is an intellectual experience and has value for inquiry; beauty is an aesthetic experience and has value for creating; goodness is a moral experience and has
value for conduct. Very early it was discovered that the good in morals is beautiful and the bad is ugly.

Looking at a painting or reading a poem or hearing a symphony becomes aesthetic when prizing or liking the painting or poem or symphony pervades the act as something worth sustaining or developing.

Judgments of liking or admiring something become judgments of value in the process of evaluating through inquiry whether the thing is worth being liked or being admired. Should the evaluating start with the statement, "I like the picture," it will end, if the inquiry confirms this statement, in the judgment, "The picture is beautiful." At first we are overwhelmed by the sudden glory of the landscape or by the majestic proportions of the cathedral. Soon we subject the aesthetic object to critical discrimination in order to reveal its worth.

The aesthetic object is characterized by traits of such qualities as wholeness, completeness, integration, coherence, continuity, cumulation, conservation, tension, and anticipation, not possessed by the objects of scientific or moral experience as such. An experience "is aesthetic in as

104 Dewey, Logic, 177, 178.
105 Dewey and Tufts, Ethics, 298-299.
106 Dewey, "The Field of 'Value'," Value, ed. Lepley, 73.
108 Dewey, Art As Experience, 137, 145, 146.
far as it is final or arouses no search for some other experience." Any experience that can be designated emphatically by the name an experience is aesthetic and even the conclusion reached during an inquiry in the physical sciences is aesthetic. 111

Art is nature transformed into new relationships so as to evoke a new response. The grief which Tennyson describes in his poem, "In Memoriam," is grief as expression; while grief manifesting itself in weeping and downcast frame is discharge. Art reveals the expressiveness of things so that we forget ourselves "in the delight of experiencing the world about us in its varied qualities and forms." 112

A work of art involves substance and form and self-expression. A poem is constituted of what is said, how it is said, and the self-expression of the poet. Substance and form present themselves as one, although they are not identical. 113

Between science and art there is an unbridged gap. For science colors are oscillations; for art they are qualities of the objects. Because of this fact we react to a painting with the emotion of enjoyment; but the painting has other sense qualities integrated with it which are also involved in our reaction of enjoyment. 114

110 Dewey, Quest for Certainty, 235.
111 Dewey, Art As Experience, 135.
112 Ibid., 70-79, 10h.
113 Ibid., 11h.
114 Ibid., 121, 123, 12h, 13k, 135.
Composer, writer, painter, sculptor work with material which offers resistance and sets up tensions within them, but they are relieved of the pressure exercised by an immediate audience. But with regard to the singer, dancer, or actor resistance and tension in the form of embarrassment, fear, awkwardness, self-consciousness, lack of vitality, are partly in his organism and partly in his audience. 115

In ancient Athens the arts were connected with public life, but in the Alexandrian Age the arts decayed with the consequent loss of their civic significance. "As the Church developed, the arts were again brought into connection with human life and became a bond of union among men." Through the art in the sacraments, songs, paintings, sculpture, letters, rite and ceremony, the dogmas were changed into living experiences. 116

Religion

Thus far the presentation of Dewey's philosophic ideas has made clear his opposition to substances, to ultimates, to ends for themselves, to absolutes, and one reason for his opposition has been that they would make inquiry impossible. Even a philosophy, states Dewey, is not made once for all, but must grow out of existing conditions and be reconstructed when

115 Ibid., 417, 157-162.
116 Ibid., 320, 329.
conditions change. At the present time it must be relativistic because
science has become relativistic and must be formulated through scientific
inquiry.\textsuperscript{117}

In many of his writings, Dewey argues against immortality of human
personality, existence of a personal God, redemption of man, and supernatural
doctrines of any kind. His book, \textit{A Common Faith}, has a list of supernatural
doctrines which he claims have been discredited by science: ascent into
heaven by astronomy; sin, redemption, immortality by biology; religious his-
toric events and personages by anthropology, history, literary criticism;
extraordinary phenomena by psychology. He holds that scientific developments
have necessitated changes in Christian belief. Some denominations have made
such changes. "The Catholic Church, particularly, has shown leniency in
dealing with intellectual deviations as long as they do not touch discipline,
rites, and sacraments."\textsuperscript{118}

He is against religion because of its commitment to the supernatural,
because it opposes "effective realization of the sweep and depth of the impli-
cations of natural human relations," and because it is against the use of "the
means that are in our power to make radical changes in these relations."\textsuperscript{119}

\textsuperscript{117} Dewey, "Introduction," \textit{Reconstruction in Philosophy}, 8-9, 11-12,

\textsuperscript{118} Dewey, \textit{A Common Faith}, 31, 63; \textit{Quest for Certainty}, 11, 303,
305; \textit{Problems of Man}, 300; "Bishop Brown: A Fundamental Modernist," \textit{New
1, 85.

\textsuperscript{119} Dewey, \textit{A Common Faith}, 60.
Religion embodies institutional authoritarianism. "If one wants to find an uncomprising expression of the claims of the institution over the individual, one has to go ... to the Roman Catholic Church." He wants the churches to abandon the supernatural doctrines. "In that way the churches would indeed become catholic."

What particularly affects Dewey is the fact that historic Christianity separates the human race into the opposing groups "of sheep and goats; the saved and the lost; the elect and the mass." He concludes that the idea of the common brotherhood of all men has received emphasis in word and not infrequently in deed.

But those outside the fold of the church and those who do not rely upon belief in the supernatural have been regarded as only potential brothers, still requiring adoption into the family. "I cannot understand how any realization of the democratic ideal as a vital moral and spiritual ideal in human affairs is possible without surrender of the conception of the basic division to which supernatural Christianity is committed. Whether or no we are, save in some metaphorical sense, all brothers, we are at least all in the same boat traversing the same turbulent ocean. The potential religious significance of this fact is infinite."

In 1931, Dewey developed his own idea of "religious" and proposed it in place of religion or religions.

Faith in the continued disclosing of truth through directed cooperative human endeavor is more religious in quality than is any faith in a completed revelation. ... Any activity pursued in behalf of an ideal and against obstacles and in spite of threats of personal loss because

121 Dewey, A Common Faith, 82.
122 Ibid., 64.
of conviction of its general and enduring value is religious in quality.\textsuperscript{123}

He also proposed an idea of "God" in place of the Christian God. Forces in nature and in society generate ideals which are not altogether realized in action. When they are realized they are united with the actions that express them, receiving thereby solidity and coherence. "It is this active relation between ideal and actual to which I would give the name 'God'."\textsuperscript{124} This use of the word "God" seems to be a survival of his former Hegelian days when he called "God" the unity of the ideal and real and also the unity of the self and the world, both of these unities being identified with the true self-related. "But the function of such a working union of the ideal and actual seems to me to be identical with the force that has in fact been attached to the conception of God in all the religions that have a spiritual content."\textsuperscript{125}

Since the retention of the word "God" might be regarded a concession to traditional theism or supernaturalism, he defends his use of the term.

One reason why personally I think it fitting to use the word "God" to denote that unity of the ideal and actual which has been spoken of, lies in the fact that aggressive atheism seems to me to have something in common with traditional supernaturalism . . . . Apart from man, nature is held \textit{by supernaturalism} either accursed or negligible. Militant atheism is also affected by lack of natural piety . . . . Use of the words "God" or "divine" to convey the union of actual with ideal may protest man from a sense of isolation and from consequent despair or defiance.\textsuperscript{126}

\textsuperscript{123} \textit{Ibid.}, 26, 27.
\textsuperscript{124} \textit{Ibid.}, 50, 51.
\textsuperscript{125} \textit{Dewey, Psychology}, 2nd; \textit{A Common Faith}, 52.
\textsuperscript{126} \textit{Dewey, A Common Faith}, 51-53.
Summary of Dewey's Metaphysical Ideas

Although late in his life Dewey replaced interaction of the organism and the environment by transaction, both terms will be used in making a summary of Dewey's metaphysical ideas.

Experience, whether the non-reflective, confused and indeterminate, or the reflective, clarified and determinate, is interaction between the organism and the things of the environment. Scientific inquiry or thinking or reflective thinking or intellectual knowing mediates between the two experiences. The reflective thinking of inquiry is an integrated interaction or transaction of the knowing and the known. In this transaction both the knowing and the known are the objects of knowing.

The reflective thinking is biological just as the interaction of the oak tree with its food is biological, and is physical just as the reaction of metals in a physical or chemical laboratory is physical. Consequently, these interactions are not different in kind and so are not man, dog, grass, gold different in kind.

Since experience and inquiry are interactions of the organism with the environment, or transaction of the knowing and the known, the organism and environment, or the knowing and the known, while they must be considered for themselves, must always be taken together in their interrelationship. Therefore, the organism and the known cannot be considered as subject and object. Also since experience and reflective thinking and sense qualities of color and sound are interactions, or transactions, of the organism and environment, they are not states of consciousness. The habits and attitudes
engendered by reflective experience as a condition for continuity in inquiry are biological. Apparently to avoid the need of mental acts Dewey makes the doubt during primary experience, which occasions the reflective thinking, a condition both in the knowing and the known, which parallelism he regards as logical to his interaction or transaction idea.

To avoid the dualism of the knowing and the known, Dewey often states that the philosophic system, which were for the period of time for which they arose correct, must now give place to his instrumentalism or experimentalism.

The organism and the things of the environment or the knowing and the knowns are events or facts. Events are actions, and they are things, for actions and things are identical. They are not substances. Substance is a logical determination, meaning that certain qualifications go together in statements as signs that certain actions will follow. Nor are they accidents, and Dewey denies that they are phenomena. The organism and the things of the environment, as being events, neither embody the principles of identity and non-contradiction, nor do they contain causes as producing effects or as being invariable antecedents. Cause and effect are means-end relationship in discourse, which on having accomplished the required organisation of the discourse fall out as unnecessary.

The world is composed of things or events associated. The association among men becomes social in the process of evolution as their organic reactions of adjustment by anticipating existential consequences develop into reflective thinking; at the same time the things or events of the environment
become cultural.

The things or events of the environment contain potentialities, which may become actual in the future. Their actualization may be accomplished through choice consequent on the reflective thinking of inquiry concerning the preferable alternative among the possible changes. The preferable alternative is at once chosen because of the preponderance that reflective thinking has given it over the other alternatives. Man has not the power of free choice in the scholastic sense.

Continued change in the environment is called for, because never does the world reach what is the best. Also never does reflective thinking arrive at the final solution; reflective thinking may reach warranted assertibility, but later the same trouble may have to be submitted to another inquiry of reflective thinking and may result in a different warranted assertibility.

There are no dualisms of any kind. Man has no immortal soul. There are no ultimates of any kind. There is no personal God. The ideal attained in improving man and the environment may properly be termed God. While all actions of man are moral, what is morally good is subject to change. Finally, things are beautiful in-so-far as they do not arouse search for another experience.
CHAPTER VIII

DEVELOPED THEORY OF EDUCATION

The birth of inquiry in the evolution of the organism's biological operation into thinking was accompanied by the change of the environment into a cultural one and of the association of men into a social one. Human culture and society are both the offspring of inquiry and with the temporal progress of inquiry they develop further.

Aim of Education

The continuity of the life process is insured through reproduction. For man, however, biological continuity is not enough; he must achieve also cultural continuity with the group by imbibing its beliefs, hopes, customs, skills. For a human group is an acculturated group, its culture being its characteristic life. In primitive social groups the young learn the ideas and customs of the adults mostly by sharing in the activities of the adults. "But as civilization advances, the gap between the capacities of the young and the concerns of adults widens . . . . Intentional agencies—schools—and explicit material—studies—are devised. The task of teaching certain things is delegated to a special group of persons."\(^1\)

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\(^1\) Dewey, Democracy and Education, 1-3, 6, 9.
A human group has a culture through inquiries, and through inquiries it grows in social organization. And we shall see that the transmission of its culture through schools to the new members must essentially be through inquiry. After Dewey finds a formal education necessary for the aim of transmitting the group culture to the young when that culture had become too complex for informal transmission, he discusses the aims of education.\(^2\)

An educational aim must be the outgrowth of "the intrinsic activities and needs" of the pupils. It "must be capable of translation into a method of cooperating with the activities of those undergoing instruction." An educational aim is not a means to a further aim. Dewey warns against general and ultimate ends in education.\(^3\)

**Education As Growth**

Dewey frequently states that life is growth. Since that is so, the transmission of the group culture to the new members of the group must be done in such a way that they grow in and through it. Education "means the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age." The value of education is in proportion to the desire it creates for continued growth and to the means it supplies for making the desire effective.\(^4\)

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\(^2\) Ibid., 117-123.
\(^3\) Ibid., 117-123, 126-128.
\(^4\) Ibid., 61, 62.
The conception of education as a continuous process of growth, having an aim at each stage for an added capacity of growth, is opposed to education as a process of preparation, as "formal discipline," and as subject matter mostly constituted of past culture.

Children should be regarded as members of the group and not as candidates. There are no ready-made powers but only tendencies: "of the eyes to follow and fixate light; of the neck muscles to turn toward light and sound; of the hands to reach and grasp; ... and so on." Mind should be thought of as "a multitude of different ways in which specific things—things observed, remembered, heard of, read about—evoke suggestions or ideas that are pertinent to a problem or question and that carry the mind forward to a justifiable conclusion." Will is "an attitude ... towards the production of possible consequences, ... involving effort to foresee clearly and comprehensively the probable results of ways of acting, and an active identification with some anticipated consequences." When we vary the co-ordinated responses and stimuli and relate our learning to social interests,

5 Ibid., 63.
6 Ibid., 70-72; Dewey, How We Think, 67.
7 Dewey, Democracy and Education, 68, 89.
8 Ibid., 63.
9 Ibid., 70-73.
10 Dewey, How We Think, 65; Democracy and Education, 153-155.
the ability which we acquire can be effectively used in a wide field of activities. Skill and understanding are carried over from one experience to another because the experiences have like elements. That makes the transfer possible and controls it is thinking which consciously grasps the common elements.

To make the culture of the past the main material of education "cuts the vital connection of present and past, and tends to make the past a rival of the present and the present a mere or less futile imitation of the past." The past should be integrated with the present so that it will be directive of present activities.

Education as growth involves among other things "the direction of power into special channels: the formation of habits involving executive skill, definiteness of interest, and specific objects of observation and thought." All the activities for growing must be in relation to the child's specific powers which are to be carried onward in their development. Habit in the biological sense has as its basic characteristic the fact that every reflective experience "modifies the one who acts and undergoes while the modification affects, whether we wish it or not, the quality of subsequent experience."

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12 Ibid., 77-79.
13 Dewey, How We Think, 67.
14 Dewey, Democracy and Education, 86, 89.
15 Ibid., 59, 61.
16 Dewey, Experience and Education, 26-27.
The Need That Growth Be Through Vital Experiences

In school the young are to grow through experiences in which they perceive and handle and judge things and reorganize the experiences themselves, adding to their meaning and increasing their own personal ability "to direct the course of subsequent experiences." This way of experiencing things is inquiry. Vital experiences are always complete experiences, completed through inquiry and not the macroscopic experiences which contain the problems requiring inquiry for their resolution. In his discussions Dewey uses "experience" mostly for the completed experience of inquiry.

To experience something is to act upon it, to do something with it when we experience "we suffer or undergo the consequences . . . . Put the measure of the value of an experience lies in the perception of relationships or continuities to which it leads up." Pupils should be led to have vital and fruitful experiences.

Learning through experience is learning through thinking or reflecting, which is "the discernment of the relation between what we try to do and what happens in consequence." Thinking occurs during inquiry, inquiry being reflective experience. Successful inquiry results in the subject matter of the inquiry, which by reason of its obscurity started the inquiry, receiving

17 Dewey, Democracy and Education, 169-177, 192, 319-322, 3.
18 Ibid., 163, 164, 168, 169.
19 Ibid., 169; Dewey, How We Think, 12.
meaning when the inquiry succeeds in clearing the obscurity. 21

The Criteria of Vital Educational Experience

We shall recognize desirable human experiences through "the principle of continuity of experience as a criterion of discrimination." The continuity of experience means that an experience as inquiry affects subsequent inquiry experiences. It does this by forming a habit in the person who performs the inquiry experience and by changing the environment in which he lives. 22 A habit, it must be reiterated, is the modification caused in the organism by an operational experience or inquiry so that the organism will react differently to subsequent experiences or inquiries. In so far as experience forms a habit in the learner, it is growth in the sense of developing physically, intellectually, morally. This continuity of experience, as implying continuing growth, is a criterion for discriminating between educative and mis-educative experiences. 23

An experience is mis-educative if it arrests or distorts "the growth of further experience"; if it engenders "lack of sensitivity and of responsiveness"; if, while producing "automatic skill in a particular direction," it lands the learner "in a groove or rut"; if, although enjoyable, it forms "a slack and careless attitude"; if it is not linked with other experiences into


22 Dewey, Experience and Education, 76-77.

23 Ibid., 26-29.
Experience is educative when it engages the learner's activities and when it lives "fruitfully and creatively in subsequent experiences." It must be "so conceived that the result is a plan for deciding upon subject matter, upon methods of instruction and discipline, and upon material equipment and social organization of the school."  

To some degree an experience changes the objective conditions or environment of future experiences. If a child learns to speak he has not only a new facility and a new desire, but he also widens the environment of subsequent experiences. While an experience affects the environment, the environment in its turn affects subsequent experiences.  

External conditions should be so ordered "that a particular kind of interaction" with the internal states occurs. This "interaction" between the internal conditions of human individuals and the external environment "expresses the second chief principle for interpreting an experience in its educational function and force." In their interaction the two sets of conditions form a situation. To live in the world means to live in situations in which the inner conditions of feelings, purposes, needs, desires, capacities, interact with the environment.
Because of the principle of continuity something is carried over from the earlier to the later experiences. "As an individual passes from one situation to another, his world, his environment, expands or contracts." Knowledge and skill gained "in one situation becomes an instrument of understanding and dealing effectively with the situations which follow . . . . A fully integrated personality . . . exists only when successive experiences are integrated with one another" and "a world of related objects is constructed."30

"When actively united, continuity and interaction "provide the measure of the educative significance and value of an experience." The learner must be accepted by the educator at "what he is at a given time" with his abilities and purposes. The environment is under the control of the educator. It comprises: what the educator does, the way he does it, his words, his tone of voice, "equipment, books, apparatus, toys, games, played, . . . and, most important of all, the total social set-up of the situations in which a person is engaged." The environment must be adapted to "the needs and capacities of the individuals who are learning at a given time."31 By reason of the principle of continuity "the future has to be taken into account at every stage of the educational process."32

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30 Ibid., 42, 43.
31 Ibid., 43-45.
32 Ibid., 47-49.
Social Growth

Education is a social process. A desirable society is one in which there are numerous and varied points of shared interests, mutual interests being recognized as factors in social control; and in which there are free interactions between social groups, continual readjustment being achieved through inquiry to meet the new situations produced by varied intercourse. Such a society is a democratic society. A democratic society is, by its very nature, opposed to authority from without. This is so because it is based on "voluntary disposition and interest," a condition which only education can create. 34

The social life in school must be organized in a democratic way in relation to the aptitudes and interests of the young apart from any economic, national, racial, or cultural stratification. 35 The learning must be social through mutual exchange of ideas and social control. Such an association with others will bring out many capacities of the individuals. Mentally, however, the pupil will be individualistic, doing his own thinking, having his own problem and purpose, and being original in point of view and predilection and mode of attack. 36

33 Dewey, Democracy and Education, 115, 100.
34 Ibid., 101.
Democracy being by its very nature progressive, education in it should not be that of a static society in which there is "a sort of catching up of the child with the aptitudes and resources of the adult group." Rather its education should be that of a progressive community in which the experiences of the young are so shaped that better habits are formed in them than exist in the adults with the result that they will "secure social changes without introducing disorder," and make their society an improvement over that of their elders. 37

The Use of Experience for Growth

Experience is educative when it engages the learner's activities and when it lives "fruitfully and creatively in subsequent experiences." If properly conceived it will include "a plan for deciding upon subject-matter, upon methods of instruction and discipline, and upon material equipment and social organization of the school." 38

"Method means the arrangement of subject-matter which makes it most effective in use." Method and subject-matter are essentially one. "A piano player who had perfect mastery of his instrument would have no occasion to distinguish between his contribution and that of the piano." The teacher should use methods intelligently, adapting them to the situations and arranging

37 Ibid., 91, 92, 115.

38 Dewey, Experience and Education, 16-17.
that each learner have opportunities to employ his powers in meaningful activities. 22

Since experience is the interaction between the organism and the environment, the latter has an educational impact. Educators should, therefore, "recognise in the concrete what surroundings are conducive to having experiences that lead to growth" and should know how to get out of the surroundings "all that they have to contribute to building up experiences that are worth while." They should be concerned about the environment both of the school and of the community. 24

The school should be organized as a miniature community life where study and growth are shared experiences. "Playgrounds, shops, workrooms, laboratories not only direct the natural active tendencies of youth, but they involve intercourse, communication, and cooperation." Between the learning in school and out of school free interplay should be fostered. 41 The school arranges to transmit only those cultural achievements which will improve society and reinforce the best attitudes, giving to each individual an opportunity to escape from the limitations of his social group "and to come into living contact with a broader environment." 22

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24 Dewey, Experience and Education, 32-36.

41 Dewey, Democracy and Education, 446.

22 Ibid., 24.
The education through experience is indirect or direct, informal or formal. In indirect, informal education the pupil is made "a sharer or partner in the associated activity so that he feels its success as his success, its failure as his failure." Naturally the formal instruction must carry most of the burden of instruction. One of the very important educative problems "is the method of keeping a proper balance between the informal and the formal, the incidental and the intentional, modes of education."[43]

Collateral acquisitions in learning, such as attitudes, likes and dislikes, especially desires to go on with learning, since they count for the future, are often of greater value than the subject-matter studies.[44] Important among the attitudes for reflective thinking or inquiry are: open-mindedness or absence of prejudice; directness or confidence; single-mindedness or absorbed interest; responsibility or considering in advance the consequences and accepting them.[45]

Those materials for learning must be selected for the young people from the range of existing experiences which are most congenial and best adapted to their stage of development; which prepare them best for the social responsibilities of adult life; which will form in them habits of acute observation and of consecutive inference; which "have the promise and potentiality of presenting new problems which by stimulating new ways of observation and

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[43] Ibid., 16-17, 20, 22, 8-10.
[44] Dewey, Experience and Education, 49.
judgment will expand the area of further experience"; and which, while connected with experience already had, will enable them to enter new fields of study. 16

Since present experience must be considered moving, it will include "the past to direct its movement." 17 The past cannot be ignored. Its achievements "provide the only means at command for understanding the present." Present experience "can expand into the future only as it is also enlarged to take in the past." For example, the effect of dealing with the social and economic problems of today without considering them in the history of their development would result in the adoption of superficial measures. 18

Problems are the stimuli of thinking, and in overcoming them through the exercise of intelligence in inquiry growth takes place. The educator should see to it that a problem arises out of the conditions of present experience, "is within the range of the capacity of students; ... arouses in the learner an active quest for information and for production of new ideas." 19

While the young are learning through their own experience, they are thinking concretely, using thinking "as a means to some end, good or value beyond" thinking. It is necessary for them to pass from concrete thinking to abstract thinking which means using thinking for more thinking. There are

16 Dewey, How We Think, 52; Experience and Education, 90, 92.
18 Dewey, Experience and Education, 95-96.
19 Ibid., 96-97.
three aspects in going from concrete to abstract: beginning with practical manipulation; transferring interest to intellectual matters—properties, consequences, structures, causes, effects; and developing delight in thinking.  

While the first step in learning is finding subject-matter in experience, the second step is the progressive development of what is already experienced into a fuller and richer and also more organized form, a form that gradually approximates that in which subject-matter is presented to the skilled, mature person.  

Ability to organize knowledge consists very largely in the habit of reviewing previous facts and ideas previously learned and relating them to one another on a new basis.

The educator "cannot start with knowledge already organized and proceed to ladle it out in doses." The step of organization seems to receive less thought and attention from some progressive schools, yet the principle of continuity requires that it receive the same.  

If the progressive schools fail "to obtain ever-increasing organization of facts and ideas" on the basis of experience, the tendency to return to "intellectual and moral authoritarianism" will be strengthened.

The range of things a person can find out through his own experience is narrow. "In spite of the great extension of direct observation in school, the vast bulk of educational subject-matter is derived from other sources—
from textbook, lecture, and **viva voce** intercourse." The problem is "how to 
get intellectual good out of what persons and books have to communicate."

Only that material should be sought through communication, which cannot read-
ily be attained through personal experience, can be used as a stimulus, with-
out being regarded as a dogmatic finality, and is relevant to some vital 
question in the student's experience.\(^55\) On occasions which are not and cannot 
be foreseen, improvisations should be utilized. But they should not be trusted 
to provide the chief material of learning.\(^56\)

The various studies in subject-matter represent the working resources 
of the educator. They are grouped as: skill studies—reading, writing, 
figuring, music; information studies—geography, history; disciplinary studies 
—arithmetic, grammar.\(^57\) The criterion of selection should be their social 
worth: their adaptations to the needs of the community; their value for im-
proving community life.\(^58\) Learning cannot begin with the organized matter 
which the specialist has achieved or the adult can understand, but it should 
continuously move toward it as the goal.\(^59\)

The early experiences of the child are concrete cases of means—
consequence relations. The means and ends must match in simplicity the

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\(^56\) Dewey, *Experience and Education*, 96.

\(^57\) Dewey, *How We Think*, 61

\(^58\) Dewey, *Democracy and Education*, 211, 225.

\(^59\) Dewey, *Experience and Education*, 105.
immaturity of the learner. Shops and kitchens are of value because "they provide opportunity for the kind of activity or for the acquisition of mechanical skills which leads students to attend to the relation of means and ends, and then to consideration of the way things interact with one another to produce definite effects."60

It is necessary that the successive phases of the subject matter be brought into relationships with one another. To do this, "there must be an articulation of the curriculum with the broadening range of experiences had at home, in the neighborhood and community. This principle applies at the beginning and all the way through."61

In the curriculum essentials must be placed first, refinements second. The essentials have to do with the problems of living together and of developing social insight and interest. "When education starts from and with experiences and capacities of the learners "the artificial gap between life in school and out is reduced, motives are afforded for attention to a large variety of materials and processes distinctly educative in effect, and cooperative associations which give information a social setting are provided. The final consequence will be "intellectual results and the forming of a socialized disposition."62

60 Ibid., 101-106.
Values in Educative Growth

Ordinarily the specific values discussed in education consist of "such things as utility, culture, information, preparation for social efficiency.” Standards of values will be appreciated best by the pupils if they have arrived at them through their own experience. When the standards are impressed upon a pupil by others "there grows up a split between a person's professed standards and his actual one.”

Appreciation applies to all things and not only to the fine arts. A thing is appreciated when "it is felt to be connected with the needs and satisfactions of the whole personality” so that it possesses immediate value. Literature, music, drawing, painting, etc., in education "are the chief agencies of an intensified enhanced appreciation.... They are not luxuries of education, but emphatic expressions of that which makes any education worth while.”

An act of appreciation is an intrinsic value which is not subject to comparison. The enjoyment of reading a book cannot be compared with that of hearing a symphony, or with that of conversing with a friend, or with that of earning money. "But there may arise a situation in which they compete

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63 Ibid., 271.
64 Ibid., 276-279.
65 Ibid., 276.
66 Dewey, How We Think, 277.
67 Dewey, Democracy and Education, 276, 279.
or conflict. "Consequently, there is no hierarchy of values among studies." As long as a topic "makes an immediate appeal, it is necessary to ask what it is good for." It is desirable that a topic be presented in such a way that it either have an immediate value or be perceived as an instrument to achieve something of intrinsic value.

It is possible to classify the various phases of life and such classification enables us to understand the breadth and flexibility of education. All classification is provisional. The following indicates the breadth of education:

the kind of experience to which the work of the schools should contribute is one marked by executive competency in the management of resources and obstacles encountered (efficiency); by sociability, or interest in the direct companionship of others; by aesthetic taste or capacity to appreciate artistic excellence in at least some of its classic forms; by trained intellectual method, or interest in some mode of scientific achievement; and by sensitiveness to the rights and claims of others—conscientiousness. And while these considerations are not standards of value, they are useful criteria for survey, criticism, and better organization of existing methods and subject matter of instruction.

A course of study should be both cultural or liberal and utilitarian or useful. Indeed, "instruction which, in aiming at utilitarian results, sacrifices the development of imagination, the refining of taste and the deepening of intellectual insight—surely cultural values—also in the same degree renders what is learned limited in its use." An education designed simply to

66 Ibid., 272, 270.
69 Ibid., 261, 262.
70 Ibid., 263, 264.
71 Ibid., 265-266.
give skill is "illiberal and immoral."72

Today all occupations are "instinct with applied sciences." Schools should bring about an understanding and appreciation of this fact.73 It is "more important to keep alive a creative and constructive attitude than to secure an external perfection." The teaching of economic activities, such as gardening, should be for the sake of their scientific content and their social value. Elementary students will learn civics and economics directly by considering "the place and office of industrial occupations in social life."74

In geography the earth should be regarded as the home of men which enters into the make-up of the social happenings which constitute history. History should be presented in its relationship to the present. "The true starting point of history is always some present situation with its problems."75

Science is knowledge arrived at through deliberate use of methods of observation, reflection, and testing "within experience, not beyond it, to give it an intelligent or reasonable quality."76 However, childhood is not the age to study scientific facts the laboratory way.77 The immature pupil should begin with his own experiences and apply the scientific method

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72 Ibid., 362-363, 364-365.
73 Ibid., 321.
74 Ibid., 231-232, 236.
75 Ibid., 297-299, 290-291.
76 Ibid., 256, 263, 264, 257.
77 Dewey, How We Think, v.
to them. 78 We should also learn the use of science in everyday social life. 79

The obvious starting point of scientific instruction is the utilization of the "familiar occupations and applications of direct observation and experiment." Science is thus known also in its human or social aspect, becoming humanistic or cultural. 80 The advanced in maturity may take up science directly. In biology living things may be studies not only through the laboratory but also through field study. In physics observation of light, heat, electricity, gravity, prepares for study under laboratory control. In this way the student will realize that the laboratory and the out-of-door facts are the same. 81

More important than learning facts of science is the learning the use of the scientific method of inquiry for life's problems. 82 The method of science is also of aid in regard to the social and economic order, for it indicates measures and policies for improving it. 83

Traditionally schools have put science in opposition to literature and history, perhaps because science was a late comer into the curriculum. In reality there is no opposition. "Knowledge is humanistic in quality not

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78 Dewey, Democracy and Education, 257, 298.
79 Dewey, Experience and Education, 98.
80 Dewey, Democracy and Education, 335, 336, 338.
81 Dewey, How We Think, 256.
82 Dewey, Democracy and Education, 257-298.
83 Dewey, Experience and Education, 98-99.
because it is about human products in the past, but because of what it does in liberating human intelligence and human sympathy."

Each person has a variety of callings. "He must, at some period of his life, be a member of a family; he must have friends and companions; he must either support himself or be supported by others. ... He is a member of some organized political unity, and so on." However, he must also have a business calling. The efficiency of a person in his business calling is determined by its association with other callings. "To find out what one is fitted to do and to secure an opportunity to do it is the key to happiness."

The earlier preparation for vocations should be "indirect rather than direct; namely, through engaging in those active occupations which are indicated by the needs and interests of the pupil at the time." 65

In vocational and industrial education, "the tendency has been to separate vocational or industrial from 'cultural' education, when the obvious need is to organize a system which serves both ends by means of the same curriculum and methods." 66 The school's problem is "utilizing the factors of industry to make school life more active, more full of immediate meaning, more connected with out-of-school experience." 67

That the liberal arts college may function duly in a democratic society, it must bring about "interfusion of knowledge, of man and nature, of

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61 Dewey, Democracy and Education, 267, 269.
65 Ibid., 359, 360, 363.
66 Dewey, Problems of Life, 75, 146.
vocational preparation with a deep sense of the social foundations and social consequences of industry and industrial callings in contemporary society." This includes the use of literature and of science. In this way the ability will be developed in the students "to appraise the needs and issues in the world in which we live." 5

Interest and Discipline in Educative Growth

Growth in knowledge through experience by way of testing an hypothesis in contact with others is identical with character or moral growth. For the seeking of knowledge "builds up social interest and confers the intelligence needed to make the interest effective in practice." 6

Qualities of mind involved in learning, such as, open-mindedness, sincerity, interest, breadth of outlook, and so on are moral. Because of their obvious social relationships, honesty, truthfulness, chastity, amiability, are emphatically moral. Desirable aims and values in education are moral. Morals have to do with the entire character which is identical with the man in all his concrete make-up and manifestations. 70

A person is virtuous when he is fully and adequately what he can become "through association with others in all the offices of life." Moral

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89 Dewey, Democracy and Education, 113-114.

90 Ibid., 114-115.
life and social life are one. What he gains should balance with what he receives in living with others. "Discipline, culture, social efficiency, personal refinement, improvement of character are but phases of the growth of capacity nobly to share in such a balanced experience." Education is a means to such a life and is such a life. 91

In learning, as in any activity with an aim, interest and discipline are necessary. There is the beginning, consisting of the present abilities and attainments of the learner, and there are ends to be attained; but the beginning and ends can be connected only through activities as means or intermediate steps. A material becomes interesting in the realization that it is a means in attaining one's purposes. 92

However, acts of learning may of themselves be unattractive. "Willingness to work for ends by means of acts not naturally attractive is best attained by securing an appreciation of the value of the end." The interest in the success of an activity should be gradually transferred to the study of objects in their properties, structures, causes, effects, consequences, passing from the interest in the concrete to interest in the abstract. An example is passing from the playing of a Chopin nocturne to the theory of music. 93

Theoretical thinking and practical thinking do not surpass each other, but to have command of both is of a higher order than to have command

91 Ibid., 415-417.
92 Ibid., 149, 161.
93 Dewey, How We Think, 286, 218, 225-227.
of only one. In school the aim should be to effect a balance between the theoretical and practical thinking, having regard to individual differences. In those who have dispositions toward the practical, the larger number, curiosity and desire for theoretical thinking should be engendered. Those who have a taste for the abstract, the smaller number, should be given opportunities for practical thinking. 94

Dramatic quality in learning experience creates interest in them. The working with plants and animals as beings that act rather than as inert specimens with an inventory of static qualities invests the learning activity with dramatic quality. 95

Acting from "principle" and acting from "interest" are not opposed. To act from interest is not to act selfishly. "In fact, self and interest are two names for the same fact; the kind and amount of interest actively taken in a thing reveals and measures the quality of selfhood which exists." 96 Sometimes interest ceases and attention flags so that reinforcement is needed. "But what carries a person over these hard stretches is not loyalty to duty in the abstract, but interest in his occupation." 97

"The time difference between the given incomplete state of affairs and the desired fulfillment" demands discipline. Discipline is defined as "the deliberate or conscious disposition to persist and endure in a planned course

94 Ibid., 225-229.
95 Ibid., 253-255.
97 Ibid., 410.
of action in spite of difficulties and contrary solicitations." While learning involves discipline, "it proceeds by engaging the mind in activities worth while for their own sake."  

The faculty psychology was particularly given to the idea of formal discipline, the use of a special method to train the faculty of thought in thinking. Habits of reflective thought can be developed only by providing the conditions for thinking and controlling them. There is an "innate" disposition to think reflectively. "The mind at every stage of growth has its own logic." The real problem is to transform natural powers into expert powers. Many a teacher thinks he is disciplining the minds of pupils when he is really causing them to dislike study and to believe that using the mind is disagreeable.

**Growth Through Personal Freedom**

"The discipline that is identical with trained power is also identical with freedom." Freedom means ability to act of oneself without the aid of another. "Freedom is achieved by conquering obstacles." The ordinary good citizen acts as controlled socially without feeling any restriction in his personal freedom. The child regards the rules as part of the game.

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98 Ibid., 161, 162.
99 Dasey,How We Think, 56, 67.
100 Ibid., 56-57, 65-66.
101 Ibid., 66.
102 Dasey, How We Think, 67.
While he may at times think a decision is unfair, he will not object to rules. Social control is possible without the violation of individual freedom.\textsuperscript{103}

In the traditional school the teacher was forced to use personal commands unduly because the school "was not a group or community held together by participation in common activities." In the new schools, social control is primarily exercised through "the very nature of the work done as a social enterprise in which all individuals have an opportunity to contribute and to which all feel a responsibility."\textsuperscript{104}

But such a community life does not come about spontaneously, it must be planned with thought in advance. Because of the principle of interaction which makes education a social process, the teacher is a member of the group in school and as the most mature member "he has a peculiar responsibility for the conduct of the interactions and intercommunications which are the very life of the group as a community." The freedom both of the children and of the teacher must be respected.\textsuperscript{105}

Occasions arise, but they are few, when authority, the parent or teacher, has "to intervene and exercise fairly direct control." When this is necessary, "the parent or teacher exercises it as the representative or agent of the interests of the group as a whole."\textsuperscript{106} In dealing with

\begin{itemize}
\item[103] Dewey, *Experience and Education*, 55-56.
\item[104] Ibid., 60-61.
\item[105] Ibid., 61, 62, 65, 66.
\item[106] Ibid., 58-59.
\end{itemize}
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theirs,
and
at the same time should not allow them "to stand permanently in the way of the educational activities of others." However, exclusion is not a solution, for it may strengthen the cause of these undesirable anti-social attitudes.\textsuperscript{107}

While convention of manners, good manners in the manifestation of politeness and courtesy, differs "from place to place and time to time," its existence "is a uniform attendant of all social relationships." In some progressive schools visitors have been shocked "by the lack of manners they come across." This is a failure in education. When good manners are not attended to, attitudes and habits "are in process of formation that stand in the way of the future learning that springs from easy and ready contact and communication with others."\textsuperscript{108}

Freedom means "power to act and execute independent of external tutelage."\textsuperscript{109} Implied in this freedom is reflective thinking or inquiry. Freedom is not to be identified with freedom of external or physical activity, although this freedom is inseparable from freedom of intelligence.\textsuperscript{110}

External freedom in the sense of freedom of movement of the learners has a particular value. It permits the teacher to get knowledge of them individually. Of course there should be "brief intervals of time for quiet

\begin{itemize}
\item \textsuperscript{107} Ibid., 62-63.
\item \textsuperscript{108} Ibid., 67, 69.
\item \textsuperscript{109} Dewey, \textit{How We Think}, 57.
\item \textsuperscript{110} Dewey, \textit{Experience and Education}, 69.
\end{itemize}
reflection provided for even the young. . . to organize what has been gained in periods of activity in which the hands and other parts of the body beside the brain are used." Freedom of outward action "is a means to freedom of judgment and of power to carry deliberately chosen ends into execution." It is the function of the educator to determine at every stage of development the amount and the quality of this kind of free activity required as a means of growth. 112

Freedom is identified with power to frame purposes and to carry them into effect. "Overemphasis upon activity as an end, instead of upon intelligent activity, leads to identification of freedom with immediate execution of impulses and desires." The aim is "creation of power of self-control," ordered not by immediate whim and caprice, but by intelligence. 113

The teacher should be careful not to force the activities of his charges into channels which express his own purpose. We will avoid this danger by finding out the capacities, needs, and past experiences of those under instruction and by allowing them to participate with him in developing a plan and project. "The essential point is that the purpose grow and take shape through the process of social intelligence." 114

The advance in scientific knowledge through the scientific method

112 Ibid., 73.
113 Ibid., 77-78, 79.
114 Ibid., 82-85.
that is socially controlled means an advance in individual liberty, the bringing about of a union of the authority of science and personal human liberty. It is genuine individual freedom if it is general and shared and has the backing and guidance of socially organized intelligent control.115

**Growth Toward Social Efficiency**

Education, being social, must be socially efficient. As an educational purpose, social efficiency means "cultivation of power to join freely and fully in shared or common activities. This is impossible without culture, while it brings a reward in culture, because we cannot share in intercourse with others without learning."116

Democracy can function only if "the intellectual capacities of each member of society" are developed. "For this reason we are committed to a system of public schools, supported at public expense, open and free to all, and with, in theory, an uninterrupted ladder from infancy up to the mature training of the university and professional school." However, since a ruling class in the government might use the school to fill the young plastic minds with doctrines favorable to the interests of their own class and to suppress freedom of inquiry, there is justification for the existence of private schools.117

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The people of the United States are of many national origins and are divided among several races. Education should be an important agency for bringing about unity among them "by drawing out and composing into a harmonious whole the best, the most characteristic which each contributing race and people has to offer."\textsuperscript{116}

Since more than any other agency the school develops freedom of inquiry, discussion, and expression, it should not only practice these freedoms and instill faith in them, but also should see to it that their charges leave its walls with ideas worth thinking and expressing and with the courage to express them. To train its charges in the freedom of intelligence and other democratic practices, the democratic spirit should pervade instruction and the administration of the school.\textsuperscript{119}

In order to perform their educational function effectively, the teacher and administrator, as human beings, as members of the community, and as educators, must actively work in reconstructing our social order.\textsuperscript{120} The organization for social improvement should be closely related to existing social conditions. In this way we "will fix our minds on asking what we can do in terms of the means which we command for doing what we want to do."\textsuperscript{121}


\textsuperscript{120} John Dewey, "Education and Our Present Social Problems," School and Society, XXXVII, April 15, 1939, 475-476; Problems of Men, 52-53, 55.

\textsuperscript{121} Dewey, "Education and Our Present Social Problems," School and Society, XXXVII, 474.
There should be democratic relationships between the teachers, pupils, and administrators. Teachers should themselves or through representatives democratically chosen "participate in the formation of the controlling aims, methods and materials" of their school. They should take greater part in the organization and conduct of the school and have more responsibility in school administration and in school relations with the public.

Education can be made the means for a better democratic life in the future. When industrialism began, hopes were conceived of a higher standard of life for all. The school was regarded as the ladder for advancing "from an overalls job to a white collar position" and occasionally perhaps to wealth. There are forces opposing the final achievement of plenty and hindering the extension of democracy into business. Teachers will be drawn into the struggle when they strive to teach the facts "about unrealized human potentialities and possible abundance for living."

In achieving an ideal democracy, the school, while the greatest force in education, has rivals in the family, occupations, press, radio, theater, government, political campaigns, and social order. In the future, factories and offices "will take over some of the functions of the school." The teacher will become a mediator and interpreter of what vocations other


124 John Dewey and Goodwin Watson, "The Forward View: A Free
than his own can contribute to the growth of human personality; classrooms may become places where experiences are analyzed and organized or life may be tried out along lines which cannot yet be made actual "in the large and complicated world of affairs." In the education of the preschool child when the barriers to economic abundance have been broken down, a great many teachers will be used to visit homes and "conduct excursions or play grounds or studies or clinics."12

As society becomes more democratic and socialized, educative experiences will be had "in doctors' offices, in museums, newspaper plants, farms, forests, steamboats, buses, art studios, factories, stores, government offices, civic concerts, theaters, public discussions, and in the thousand other enterprises of living." In the classroom the teacher will be occupied "with the integration of these varied educative experiences in the developing personality," and will observe the individual child "to know whether the various institutions are as educative as the child needs them to be." As a student of child development, he will be "a friendly guide to individual children, an organizer of harmonious group activities and a 'generalist' in thinking about the effects of the social order upon personal growth."126

Because the function of organized society will be complicated and the patterns of activities within it changing, there will be need for learning after school by adults, since learning will have to be continuous. Also there

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127 Ibid., 332-337, 339-341.
126 Ibid., 338-339.
will be continued need of guidance for keeping up in vocations, changing occupations, adjustment because of waning powers, and "for the final great achievement of noble death." 127

The teachers themselves must be exceptionally well educated. For besides being engaged in the activities already mentioned they "will be continuous curriculum-builders, using the staff and forms of community life and relating all of this to the developing needs of a group of learners who are thoroughly understood." As democracy becomes more educative, it will make teachers better through the special training which it requires. The pupils themselves, as they are taught in better schools and by better teachers, will in their turn be better prepared to undergo training for teaching. This process will ever go to a higher level. 128

"When our economy is organised to consume the output of our present" production, everyone will be provided with the necessities and a fair share of comforts and luxuries. Then we shall have a society "in which teachers are fairly secure and truly free," and teaching will become the high art that it rarely is today. 129

127 Ibid., 338-341.
128 Ibid., 341-342.
129 Ibid., 343, 344.
Philosophy and Education

Although Dewey does not admit an ultimate end for schools, he actually makes their ultimate aim the preservation of the human group. This involves the transmission of the group culture to the young members. Then he calls the transmission of the group culture educational growth, which seems to mean that the group culture should be so transmitted to the young members that they grow educationally. They grow mostly through having experiences in the form of inquiry. Since, in order that human beings may grow, they must live in society, the transmission of the group culture to the young members must be so made that they will grow in the direction of feeling and acting as members of the group. In transmitting the group culture to the young the school should eliminate the unworthy features, accomplished through inquiry, and retain only such features as make for a better society. This also is a constituent element of the ultimate aim. Thus there is an ultimate aim in Dewey's theory of education, and it consists in the continuation of the human group which includes two objectives of immediate character: the transmission of the group culture to young members in such a manner that they will grow into good members of the society of their group, and the transmission of culture in such a way that the society of their group is lettered.130 This description constitutes a résumé of Dewey's philosophy of education.

Dewey says practically the same thing in making democracy central—

130 Dewey, Democracy and Education, 1-2, 3-12, 127-128, 16-17, 26, 27.
but he avoids calling it the ultimate aim. Education is "the process by which social groups maintain their continuous existence." To be progressive, the social groups should form a democratic society. The democratic society is therefore the criterion of education. It implies "the ideal of a continuous reconstruction or reorganization of experience" in order to enrich the recognized meaning of experience and to increase "the capacity of individuals to act as directive guardians of this reorganization." The realization of a continuous reconstruction of experience is being hindered by the idea of experience consisting of a variety of domains. This idea is due to "the division of society into more or less rigidly marked-off classes" and results in such dualisms as "labor and leisure, practical and intellectual activity, man and nature, individuality and association, culture and vocation" with their philosophical counterparts of "mind (or spirit) and matter, body and mind, the mind and the world." The basic conceptions of the Dewey theory of education are:

the biological continuity of human impulses and instincts with natural energies; the dependence of the growth of mind upon participation in conjoint activities having a common purpose; the influence of the physical environment through the uses made of it in the social medium; the necessity of utilization of individual variations in desire and thinking for a progressively developing society; the essential unity of method and subject matter; the intrinsic continuity of ends and means; the recognition of mind as thinking which perceives and tests the meanings of behavior.131

Thus implicit in a theory of education is a philosophy. "Philosophy is thinking what the known demands of us—what responsive attitude it exacts."

131 Ibid., 375-377.
It deals with the possible and not with the accomplished facts. It is the organization of "the varied details of the world and of life into a single inclusive whole" so as to have, as far as is possible, a unified, consistent, and complete idea of experience. If education is thought of as "the process of forming fundamental dispositions, intellectual and emotional, toward nature and fellow men, philosophy may even be defined as the general theory of education." It signifies the attaining of a wisdom for the conduct of life. "Philosophy might almost be described as thinking which has become conscious of itself—which has generalized its place, function, and value in experience."132

Thus philosophy of education can be defined as "an explicit formulation of the problems of the formation of right mental and moral habits in respect to the difficulties of contemporary social life. . . . It is the theory of education in its most general phases."133

132 Ibid., 301, 376, 333, 376, 301.
133 Ibid., 386.
CHAPTER IX

DEWEY'S LEADING DOCTRINES IN PHILOSOPHY VIEWED IN RELATION TO SCHOLASTIC PHILOSOPHY AND CATHOLIC THEOLOGY

An account of the leading points of Dewey's philosophic thinking having been given, it remains to review those of his views which go counter to scholastic philosophy and theology. Usually he uses the term supernaturalism for any Catholic position whether philosophical or theological. Certain differences which he finds between his position and supernaturalism and some of the reasons which he gives against supernaturalism are also examined.

There Is No Specific Scientific Inquiry

Dewey glorified the method of the physical sciences and wants it to be used in all fields of knowledge. 1 As formulated by him for use in philosophy and the social sciences, 2 it can be used even in theology. However, to force every inquiry into the form of setting up an hypothesis and of verifying it is very artificial, especially since the verification is done through many inferences. 3 While the scientific method is necessary in many problems of


2 Dewey, Reconstruction in Philosophy, 133; Experience and Nature, 7.

3 James B. Conant, Science and Common Sense, New Haven, 1951, 74.
knowledge and advantageous in many more, it is not necessary in all of them. In historical matters no hypothesis ordinarily is needed. After the historical topic of investigation has been determined, it is sufficient to look for the sources of information, check their validity, interpret them, and use the inferences without prejudice and with intelligence.

In scholastic philosophy the procedure is similar to what Dewey actually has been doing in his writings. Usually St. Thomas begins by raising a question, treating the negative and positive answers as the possible hypotheses. The discussion of the wrong answer or hypothesis amounts to an historical review of unacceptable opinions. The right answer or hypothesis is defended at some length. As Dewey's method, the defense of the hypothesis proceeds operationally not through experimentation but only through imagined activities. Present day scholastics ordinarily proceed by giving the acceptable opinion or hypothesis in the form of a proposition, defending it at length and contrasting it with the unacceptable opinions of the past reviewed more or less extensively.

While Dewey confidently claims his method to be the unique method of science, Conant states unhesitatingly that there is "no such a thing as the scientific method. If there were, surely an examination of the history of physics, chemistry, and biology would reveal it." However such examination does not manifest "any one method by means of which the masters in these fields broke new ground." Moreover to reduce the investigation to one method "would be to ignore all the vitality" in the varied investigations of the past. Conant says that the scientific investigation has had three phases.
"These may be designated as (1) speculative thinking, (2) deductive reasoning, (3) cut-and-try or empirical experimentation." The first two were used by the learned men in the Middle Ages, including theologians, who "laid the foundation for the science of mechanics, the first of the branches of physics to take on modern dress."

Conant is emphatically opposed to reducing all investigations to the methods used in science.

We should hold before our students as models those few who in the world of human affairs have courageously, honestly, and intelligently based their conclusions on reason and inquiry. Furthermore, rather than leave in the minds of the pupils the very dubious proposition that the methods of science are applicable to all manner of practical human affairs, we should show how legal methods of inquiry have been used in Anglo-Saxon countries. Likewise, we must study the rational methods of merchants, manufacturers, soldiers, and statesmen which were employed with considerable success for generations, long before any idolatry of the word "science" came over the academic horizon. Too many educators appear to underrate the amount of hard-headed thinking which has been done by practical men in the history of the human race. We must stress the significance of rational inquiry throughout our general education, but the identification of this type of inquiry with science confuses rather than clarifies the presentation . . . . And positive harm is done by claiming that the scientific method is going to save us. Indeed, something close to fraud is being perpetrated when this method is defined by implication as the process by which the physical and biological sciences have reached their present stage. 5

Black, a present day logician, treats of several methods of inquiry. 6 In the field of education the investigation can be divided at least

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1 Ibid., 45, 16-16.
2 James B. Conant, Education in a Divided World, Cambridge, 1949, 120-121.
into eight types, some having subdivisions: philosophical, historical, experimental, causal comparative, genetic, case study, survey, and analytic. They are sufficiently different from each other that they need separate consideration. 7

However, probably the greatest error of Dewey in regard to inquiry is his reducing of all knowledge gained by inquiry to scientific knowledge. As a matter of fact knowledge is of two kinds. One kind of knowledge is science in the broad sense, which is based on objective evidence and not on the testimony of others. The other kind of knowledge is faith which is based on the testimony of others; history and revealed truth belong here.

According to the pragmatists, Dewey and others, all knowledge springs "from human needs, expressing itself in human actions, leading to consequences, the value of which depends on their power to satisfy human needs, like the absolutists, Kant and others, the pragmatist "generalizes categories beyond the limits in which they are applicable." In analyzing cognition he, upon finding "that we sometimes postulate, assumes that we do so always and in every case." On his part the scholastic grants "that all thought is purposive, and tends to satisfy human needs, . . . that action is essential to knowledge." At the same time he does not identify action with knowledge, but subordinates action to knowledge. 8


Knowledge Begins in Perception and Advances Through Inference

Hardly any one will disagree with Dewey that the course of acquiring knowledge can be determined only through inquiry. That we perceive what we call the red rose, the warbling of a bird, the softness of a pillow, the heaviness of an iron kettle, is immediately given. That these perceptions mean needs inquiry. The restriction of knowledge by Dewey to the results of scientific inquiry goes against common usage. He has changed "the conventional use of a familiar word in order to force the data of experience into seeming harmony with his theory." 9

Dewey finds perceptual experience to be an interaction between the organism and the environment. 10 St. Thomas concludes also that the action of the sense object "belongs both to the thing sensed and to the thing sentient." Dewey refused to go beyond interaction which he finally called transaction.

St. Thomas, however, "concludes that sensation, by its very nature, is a relation to objective reality, to its own proper sense object, and that, where there is no such sense object, sensation cannot exist. Hallucination indeed can exist where there is no sense object, but hallucination presupposes sensation." "What a person perceives is the stimulus itself. 'By intellect he apprehends as reality that which by taste he apprehends as sweet." 11

9 Ibid., 146.

10 Dewey, Experience and Education, 39-42; Experience and Nature, 6, 232-266; Quest for Certainty, 239.

Sanders gives a very fine account of the scholastic theory of sense and intellectual perception.

Man is a substantial union of soul and body. ... Since the soul is immaterial, it cannot grasp matter, but it can grasp the species or the form with which every material object is endowed. It does this through the power it has of abstracting this form from the matter through the five particular senses, and referring these perceptions to the common sense which in turn apprehends the operations of the five senses, and distinguishes the perceptions of the five senses from one another. The sensible species thus abstracted are retained by the sensitive power of the soul called the "imagination," or "phantasy," and the species thus retained is called a "phantasm." Memory is the recalling of phantasms, or species previously apprehended and retained in the imagination. This sensible species, however, is a particular; it is not a universal. It is not "tree," but "this tree," it is not "man," but "this man."

The intellect, in both its aspects, the active and the passive, has for its object, not the sensible species, or particular forms that are the object of the sensitive power, but the intelligible species, or universal forms. ... The forms ... are embedded in matter. Therefore, in order to become known, the form must be abstracted from the matter, it must be made intelligible, and this is achieved by the active intellect. The active intellect, therefore, abstracts the intelligible species, the form by which the thing is known, and presents it to the passive intellect, which takes the form into itself. In this process, the active intellect nullifies itself of the sensible species or phantasm that is present in the imagination, but it presents it to the passive intellect not in its particular form but in its universal form—not as "this tree" or "this man" but as "tree" or "man." When it is in possession of this true form, the intellect then creates a concept or word which truly represents the form. This entire process goes on without the consciousness of the learner; until a judgment is made, truth is present in the intellect, but it is not consciously present. When the intellect forms a judgment, it adds something of its own to the reality it has assimilated; it says, "this is a tree," or "this is a man," and thus brings about conformity between the concept and the object. 12

In regard to sense cognition there is the problem as to what elements are perceived and the problem as to whether these elements are, as such, real

qualities of the stimulus object. In regard to the first problem, analysis reveals that three facts are arrived at in perception: the proper sensible which is special to a particular external sense; the common sensible which is present in several external senses; and the accidentally attained sensible which, as such, is cognized only by the intellect.

In regard to the second problem as to what relationship these sensible elements have to the stimulus object, scholastics hold that this must be established by inquiry. That the common sensible as an immediate datum of the perceptual act is an ontological quality of the sensitive stimulus object but that it has some relativity about it from the person perceiving, scholastics are satisfied that inquiry establishes.\(^{13}\)

The proper sensible, also called secondary sense quality, is held by many scholastics to be a real quality of the sensitive stimulus object with some relativity from the conditions of perception. Cory remarks, "I cannot see that anyone has made out a clear case against those of us who would hold, with St. Thomas Aquinas, that secondary qualities are still objective since they are in the medium."\(^{11}\) For example, the color which we perceive the rose to have is actually a quality of the stimulus, so that what is perceived and the stimulus as it existed under the conditions of perception are the same.

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13 Carrigou-Lagrange, C. P., Reality, M.

The rose has its particular color because of the way it reacts to the electro-
magnetic oscillations which play upon it, and we see the rose in its particu-
lar color through the electro-magnetic oscillations of its color playing upon
our eyes.

The element of the sensation accidentally perceived is shown by
inquiry to be also an element of the stimulus. Further inquiry reveals that
this accidentally perceived element is substance.

Thus the percept is identical with the stimulus. The perceived
shapely red rose has as its stimulus, the shapely red rose. The shapely red
rose causes the perception of itself. A person gets excited over the moun-
tain scene as the terminus of his perceiving, and he perceives the mountain
scene in terms of its colors. He could hardly get excited over the mountain
scene if he kept in mind that the colors were not real but merely electro-
magnetic oscillations. A man loves a woman as what he perceives, he loves
the beauty of color and form which he actually perceives. A man could hardly
fall in love with a woman over her beauty if he kept his attention on her
color as electro-magnetic oscillations.

After the meaning of sense perception and sense qualities have been
determined through inquiry we know as facts that we perceive and what we per-
ceive. I know as facts that I perceive this paper and that the paper is white
and is written on. For scholastics experience means the act of perceiving the
stimulus and what is known through perceiving without the use of inference.

Another direct cognition without inference is the knowledge of self-
evident relationships between things. These relationships are cognized by
knowing the things between which the relationships exist. Such knowledge is
called also intuition. The propositions containing these immediately known
relationships are called self-evident propositions.

The other source of knowledge is inference. It proceeds through
judgments. Some judgments are known to be true because perception reveals the
relationship expressed in them. Other judgments are known to be true because
their subjects and predicates reveal the relationships between them. These
are self-evident propositions against which Dewey becomes so emotionally
wrought up; they are derived in sense experience.\(^1\) Still other judgments are
known to be true because of judgments whose truth has already been established.
The last way of setting knowledge is inference.

The making of an hypothesis is necessary either for making the inference possible or also for directing the inquiry toward some definite solution
of a problem. The inference may appear in two ways. In some problems the
hypothesis is tested by it becoming the conclusion of the inference and in
other problems by it becoming one of the premises. If we express the inference in a conditional form, some problems establish their hypotheses by the
hypotheses becoming consequents while other problems establish them by the
hypotheses becoming the antecedents. Just as Dewey, the scholastics regard
the second procedure as illegitimate in an affirmative conditional inference.

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\(^1\) Edmund H. Ziegelmoyer, "The Discovery of First Principles According to Aristotle," Modern Schoolman, XXII, March, 1945, 139; Cory, The Significance of Beauty in Nature and Art, 78–79; Aristotle, Logic, Analytica Posteri-
To use it the consequences must be multiplied, but even so the solution is never closed. The reason why positive science has not achieved certitude is due to the fact that its key problems must use the second type of inference.

Analysis makes it clear that in these perceptions and inferences the object determines the content of thought, and that between percepts, concepts and judgments on the one hand and real entities on the other, there is a correspondence or resemblance. \( \chi \) Truth, therefore, is the correspondence of the intellect with the things. "In other words, truth is the reference of the content of thought to an object to which it corresponds; while error is the reference of the content of thought to an object to which it does not correspond."

"For Dewey, then, all truth begins with a hypothesis and never wholly loses that character, lest absoluteness should cramp future reconstruction of experience." The Catholic admits there are truths of hypothetical character, but he holds that there are also truths of absolute character — facts, first principles, conclusions from first principles, and empirical facts. Immediately apprehended facts, self-evident principles, conclusions, and the testimony of others may be true, even though never entertained hypothetically or tested by action.

16 Walker, *Theories of Knowledge*, 621, 622, 625.

Scholastic Philosophic Ideas Are Empirical and Experiential

Catholic ideology, whether in its philosophical or theological aspect, together with its historical facts, Dewey rejects, because according to him it has been disproved by science, because it stands in the way of effective realization of natural human relations, and because it is not empirical and experiential. However, the philosophic ideas of Catholics have not been disproved by science, there being no opposition between Catholic philosophical or theological doctrines and the achievements of science; they do not stand in the way of effective realization of human relations, but in reality they actively promote human relations; they are, in Dewey’s acceptance of the terms, empirical and experiential, just as any of Dewey’s ideas are; and, in the same sense as in the physical or biological or astronomical or social fields, they direct observations experimentally and

10 Dewey and Bentley, Knowing and the Known, 120-171; Dewey, A Common Faith, 31, 63, 80; Philosophy and Civilization, 321-322, 326.


22 Dewey, Problems of Men, 201; Dewey, Logic, 138-132; 133-137; 165-166; 191; 197-201.
coordinate the results of these observations.

Because of the meaning Dewey gives to "empirical" and "experiential," it is important to examine whether in his sense scholastic philosophy and theology are empirical and experiential. According to him the term "empirical" refers to the origin and development of scientific statements out of concrete experiences, to the inquiry being publicly accessible and open to observation, and to the presence of scientific conclusions involving reasoning with or out of principles. "Experiential" requires that knowledge be within experience, and be an outgrowth of experience and not behind it or above it. 23

In Dewey's meaning of the terms the entire scholastic philosophy is empirical and experiential, having developed through inquiry out of concrete experience, 24 the inquiry being open to inspection. Such inquiry has established: that all beings of the world are composed of substance and accidents; that substance is composed of pure potency and substantial act; that the beings of our world are composed of existence and essence; that the substantial act of man is immaterial or spiritual and immortal. 25 Non-visibility of the spiritual substantial act of man does not make it any more non-experiential and non-empirical than the non-visibility of the electro-magnetic...

23 Dewey, Problems of Men, 217; Logic, 9, 37, 39.


oscillations make them non-experiential and non-empirical. If the subject matter of Dewey's hypotheses, although not perceptual responses, are within experience and are empirical because they are formulated for problems which arise in experience and are tested by observation, so are all the hypotheses of scholastic philosophy, including the existence of a perfect and intelligent and omnipotent God, within experience and empirical.26"

"In conducting inquiries the scholastics begin with principles or truths "which are evident from the analysis of immediate experience,"27 Aristotle definitely states, says Ziegelmeier, that we are "dependent on the senses not merely for all our concepts or ideas, that is, for the so-called simple or incomplete universals; but also that the complete universals, i. e., the principles, qua principles, must be derived from sense-experience." Ziegelmeier quotes the following pertinent passage of Ross about Aristotle.

Intuitive Reason is that by which we grasp the ultimate premises from which science takes its start. It grasps the first principles by induction. This is to be understood... as the process whereby after experience of a certain number of particular instances, the mind grasps a universal truth which then and afterwards is seen to be self-evident. Induction in this sense is the activity of intuitive reason.28

According to the scholastics the scientific knowledge is obtained

26 Ibid., II, 35-57, 69-76, 91-99, 112-116; Cory, Significance of


also through reflective thinking. A knowledge in natural sciences must be
terminated at sense in order that we may judge concerning natural things in
the manner according to which sense demonstrates them... And he who
neglects sense in natural questions falls into error. B

The inquiries of scholastics start from experience, and their hypotheses are established through observation, knowing being regarded as a fact or
an event. If an inference from the principles "happens to transcend our
immediate experience, that fact does not invalidate them, since all explora-
tion must be expected to carry us into new regions." C If the inquiry leads
to the immortality of the soul, the immortality is not outside of experience
but within experience, extending experience just like the billions of years
which inquiry shows to have gone before the present moment and the billions
that are sure to come after the present moment are still within experience. D

Similarly in philosophy the existence of God is established through
inquiry based upon experience, the reactions in perception to stimuli and the
knowings. The God so established is not outside of experience, not outside
of the cosmos, but within it. He is everywhere present. He is within all
things, He was even within John Dewey. Of course, He is not there as occupying

29 St. Thomas Aquinas, Compendium of Theology, trans. Cyril Velliot,
30 St. Thomas Aquinas, De Trinitate Postii, q. 6, a. 2; 8, 7., 1,
q. 8, a. 1, Basic Writings, ed. Peers, I, C15, 311.
31 McWilliams, S.J., "Two Cultures," Modern Schoolman, XV, 17.
32 Dewey, Experience and Nature, 3a-4a.
space or as affected by anything or as changed by anything. But he is related
to things actually and they are actually related to Him: He is in the logical re-
lation of the major kind, and they in a real relation; He through the imita-
bility of His essence and His creative act, and they through their dependence
on Him in their possibility and their existence.\textsuperscript{33}

The Supernatural Order Is Empirical and Experiential

The Catholic religion "is founded on and is a deduction from human
experience and can be applied to human life to make it more fruitful, of
greater successes than Dewey dreams of in his Instrumentalism."\textsuperscript{34}

\[\text{\textsuperscript{33} Mercier, Manual of Modern Scholastic Philosophy, II, 75-81, 96-}
98, 115-116.}\]

\[\text{\textsuperscript{34} McWilliams, "Education for Progress,"Modern Schoolman, XIX, 23.}\]

\[\text{\textsuperscript{35} Dewey, Problems of Men, 4-5, 14, 98; Common Faith, 5-6; Human}
Nature and Conduct, 295.}\]
man's life, God's will is required to make it the end of his life. In the second meaning the Blessed Trinity or One God in Three Persons, the incarnation or the possession by the Son of God of both the divine and the human natures are supernatural. We can know these truths only by God revealing them to us. But once God has revealed supernatural truths and has made the Immaculate Vision to be the end of our life, which we also know through God revealing it, they become a part of human experience and empirical in Dewey's meaning of the terms while they remain supernatural in the Catholic sense.

God made these revelations progressively through prophets and lastly through His Incarnate Son, who made known these revelations by speaking and writing. When through historical inquiry the fact of revelation has been established, as has been done, revelation has become empirical and experiential.

Jesus Christ, the Son of God made man and Redeemer of mankind, lived in the public and experiential view of the Apostles, of all those who met Him whether they believed in Him or were against Him, just as much as Dewey lived in the public and experiential view of his students, fellow-professors, and all those who met him whether followers or opponents. Christ's divinity was also empirical and experiential for all those who saw Him or heard Him; He declared His divinity by speaking almost continuously in ways in which only God can speak, always called God by Father, overtly claimed to be the Son of God equal to the Father and one with Him, clearly answered that He was the Son of God when the High Priest at His trial before the Sanhedrin asked Him

36 Hebrews, 1, 1-7.
If He were the Son of God; and in the public and experiential view of a great many people, His character, His miracles, the fulfillment of His own prophecies, the fulfillment of the Old Testament prophecies in Him, and His resurrection from the dead proved His assertion and claim that He was the Son of God to be true. 37

All these evidences were in the public and experiential view of many people, 38 and if for the completion of evidence they involved reasoning, so are reasoning processes involved in every scientific inquiry. The inquiry about the supernatural could very easily be put into the form that Dewey has set up for the field of philosophy.

By implication and direct statement he questions the historicity of Christ. He has anthropology, history, and literary criticism give "a radically different version of the historic personages upon which Christian religions have built." In discussing the religion of William James he speaks of the figure of Christianity's "reputed founder." When he reviews sympathetically the trial for heresy of an Episcopal bishop, who endeavored to discharge his episcopal duties while he accepted the results of science, Dewey remarks, "Put the instances in which childlike faith persisted while passing from extremes of literalism and dogmatism to doubt and denial of a personal God,


38 Luke 1, 2; John 1, 11; Acts 1, 3-4, 9-10; 1 Cor. 15, 3-7; John 1, 1-3.
personal immortality and the historic existence of Jesus, are certainly rare." 39  As a matter of fact the evidences for Christ's historicity are extremely great. The external and internal evidences for the authorship of the Gospels and of their reliability is conclusive; 40 it being greater than that available for the authorship and reliability of any of the Greek or Latin classics. 41 If the traditional authorship of the Gospels must be admitted because of adequate evidence, then the Christ of the Gospels must be accepted as an historical person.

In the supernatural order, life in the Beatific Vision and the life of sanctifying grace through the infused virtues and gifts of the Holy Ghost are experiential and empirical. This supernatural life of sanctifying grace becomes public through virtuous acts, whether by way of commandments or of counsels, which are initiated and aided by actual graces. These virtuous acts, being public and experiential, are reactions to the environment in the same way that Dewey explains reaction. Just as he claims for reactions,


42 Cory, Significance of Beauty in Nature and Art, 150-161.
virtuous acts are due not only to the environment but also to attitudes and habits. And inquiry can show that they are further due to graces from God; at least there is historical evidence of empirical and experiential character from the teachings of Christ and of the Apostles that graces are present. That the life of the Beatific Vision is the culmination of the life of sanctifying grace is also experiential and empirical. For, the Beatific Vision is seeing God intellectually face to face and is public in the sense of being observed by all in heaven.\(^3\)

However, Dewey through the following postulations makes all knowledge durational and extensional.

The observable extensions of knowings and knowns run across the inhabited surface of the earth; the observable durations run across cultures backward into pre-history, forward into futures—all as subject matter of inquiry.

The readings are directly observable in full behavioral durations and extensions.

Readings of subject matters are to be taken as durational both as names and with respect to all that they name.\(^4\)

Dewey is arbitrary in artificially restricting the process of inquiry. Any problem which presents itself in experience or perception—manipulation should be subjected to inquiry, and if the inquiry leads to the fact that man possesses an immortal soul or that God exists or that man has been redeemed by Christ, this fact must be accepted. Such a fact is neither an

\(^3\) St. Thomas Aquinas, *Compendium of Theology*, 153, 210, 211, 159, 175.

\(^4\) Dewey and Bentley, *Knowing and the Known*, 68, 93.
entity "intrinsic as if free behind or beyond the knowing-known events," nor is it an "hypostatized underpinning." Moreover these postulations are inconsistent with Dewey's own practice of accepting astronomical knowledge and the evolutionary hypothesis of which "the full behavioral duration and extensions" are no more directly observable and in greater part antecede any culture.

**Philosophic Morals Grow Out of Human Experience**

Over and over again Dewey emphatically states that morals must not come from without or from above but must grow out of experience. Morality, in scholastic philosophy, is developed from and through experience. From and through experience we prove the existence of one God and show that the last end of every creature is the imitation of God's essence. From and through experience we know that man has intelligence and free will. Starting with God's imitability, we can through inquiry establish that all intelligent beings have as their ultimate end the knowing of God and the appreciating of

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1.5 Ibid., 120-121; Santayana, "Dewey's Naturalistic Metaphysics," Philosophy of John Dewey, ed. Schilpp, 147.


1.7 Mercier, Manual of Modern Scholastic Philosophy, II, 209-238.


Him as He deserves to be known and appreciated, with the knowledge and appreciation of other things in relation to Him. By experience we know that man is placed in such a condition that he has it within his power to refuse to acknowledge the existence of God even after he has sufficient evidence for God's existence and has it in the power of his will not to want God even after he is convinced that God exists. Therefore he is obliged after he has sufficient evidence for God's existence to freely choose to acknowledge His existence and to appreciate Him as He deserves above all other beings, and be willing to obey and to do whatever God requires of him. From this point on, we must go to our life in its transactions with the objects of the environment to find out what the obligations are in detail. Morality consists of inner controls "worked out through the sweat, blood and tears of many generations, worked out from the same material and same method Dewey is advocating."

If God gave the Jews and through them to all mankind a complete system of morals in the framework of the ten commandments, He did this because man had developed very defective moral systems. It was necessary that the Jews because of their central position in the redemptive plan accept the true God and know the moral law. The revelation itself was empirical and within experience.

52 y. 7., I-II, q. 91, a. h. q. 98, a. h. 6, Basic Writings, ed. Pegis, II, 752-756, 811-813, 815-816.
Living According to Supernatural Morality

Is Individual and Social Growth

In the supernatural order, living morally is both individual and social growth. As a person lives supernaturally, sanctifying grace increases more and more until it culminates in the life of the Beatific Vision. The Beatific Vision becomes thus the most important motive for living morally. It is not a motive superimposed upon moral living, but it is the logical culmination of supernatural moral living.53

Individual growth through the practice of the virtues involves social growth. For while the first commandment is to love God for Himself, the second commandment is to love the neighbor as oneself and as Christ has loved us. The neighbor includes all nations and races and even our enemies.54 In living supernaturally,

The term of the movement of grace is eternal life; and the progress in this movement is by the increase of charity or of grace, according to Prov. iv. 16: But the path of the just, as a shining light, goeth forward and increaseth even to perfect day, which is the day of glory.

Eternal life is also a reward, but one involved in the very moral living in the supernatural order.55

53 S. T., I-II, q. 66, a. 1; q. 67, aa. 1, 2, 6; q. 68, a. 6; q. 111, aa. 3, 8, Basic Writings, ed. Pegis, II, 505-507; 516-519, 525-526; 537-539; 1041-1042, 1046-1047.


55 S. T., I-II, q. 111, a. 8, Basic Writings, ed. Pegis, II, 1046; 1, q. 62, a. 4, 1, 576-577.
Dewey says, "All morality is social." Even a Catholic will accept this in the sense that every moral law is for the common good, but he cannot agree to Dewey's statement that if only one man were living in the world there would be no morality. Even though only one human person were existing, there would still be a moral law for him. He would have to acknowledge God, honor Him, love Him, have confidence in Him, pray to Him. He would have to take care of himself, which includes working. He would have to be humble and weak.

**Philosophically and Theologically, Responsibility**

**Is Both Prospective and Retrospective**

According to Dewey responsibility is prospective and not retrospective. When somebody has done something that he should not have done, he is responsible for avoiding the mistake in the future and for making choices which will advance his selfhood as well as profit the society he lives in. His responsibility is independent of the fact whether at the time of doing what he should not have done he realized that he was doing wrong. A Catholic agrees with Dewey that responsibility is prospective, but he holds also that

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responsibility is retrospective. A person is responsible also for having
made the mistake if he made the mistake knowingly.

The retrospective accountability is necessary in society.\(^1\) If a
person has deliberately set someone's house on fire, he should be made to re-
pair the damage. If by telling tales about another, he has caused that person
business losses, he should be obliged to restore that person's good name and
to make good the business losses. If he has stolen something, he should re-
turn it or its value. Since this is so, the question arises under what con-
ditions he is obliged to make reparation or restitution. Certainly one who
accidentally destroyed another's property should not be held responsible to
make good the loss.\(^2\) Furthermore, the state operates on the basis of retro-
active responsibility.

This accountability is necessary also in the supernatural order,
since the moral acts of man are the means of his obtaining his supernatural
end, the Beatific Vision and a glorious resurrection.\(^3\)

\(^1\) S. T., I-II, q. 21, a. 3 Basic Writings, ed. Pagis, II, 362-363
\(^2\) C. A. Prindeville, C. V., Chapters in Religion, St. Louis, 1942,
315-316.
\(^3\) S. T., I-II, q. 19, a. 10; q. 21, 2. 4; q. 111, a. 3, Basic
Writings, ed. Pagis, II, 347-349; 361-365; 1061-1062; Tertullian, Manual of
Modern Scholastic Philosophy, I, 327-328; II, 220-222; St. Thomas Aquinas,
Compendium of Theology, I-C, 301-306.
The Acceptance of God as the Ultimate End and the Highest Value Does not Fix All Truths and Values

Dewey rejects any ultimate end as he does any highest value and self-evident truths. He thinks that when ultimates and fixities are accepted, everything else follows from them so that no selection is possible.64 Here he is still affected by Hegelianism.

Dewey's conclusion is not true. In the Catholic system, whether considered philosophically or theologically, God is the ultimate end of all things. Since only what imitates His essence is possible, all things in their development must imitate His essence.65 But we know only empirically and experientially what exists, what things are, how they originated, what the course of their development was or will be.66

For man, God is the end of his life both in the state of pure nature and in the supernatural order. As he advances in virtue he becomes more and more and more perfect as God is perfect, his moral growth culminating, since he exists in the supernatural order, in his becoming partaker of God’s own life in the Beatific Vision.67 However, to know the nature of virtuous living


67. J. T., I-II, q. 11b, as. 3, 6, Basic Writings, ed. Pegis, II, 1081-1082, 1086, 1089.
we depend primarily on revelation, secondarily on experience.

While a Catholic regards God as the highest of values and the value of all things in relation to Him, we can know the value of created things only from experience through inquiry. A Catholic puts man in value above all other things in the world, and so does Dewey apparently. And also, although not altogether as Dewey wants it, things in relation to man have to a large extent a relative value. However, the Beatific Vision always remains the highest value to man and in this life the practice of the virtues which leads to the Beatific Vision.

Dewey's Metaphysical Ideas Are Untenable

Dewey's metaphysics consists of some positive ideas and some negative ones.

Knowledge starts with perceptual interaction or transaction of the organism and the objects of the environment and is completed with the inquiry

71 Dewey and Tufts, Ethics, 210-220.
72 Ward, Values and Reality, 256-257.
transaction of the organism and the environment. The transaction of the organism and the environment is an event common to the organism and the environment. Only analysis reveals that in the transaction there are two terms: the organism which is the knower or the knowing and the environment which is the known. Although the knowing and the known can be separately examined, and Dewey does so, they must not be separated or considered in isolation or regarded as detachable elements. Knowings should be dealt with in terms of the knowns, and the knowns in terms of the knowings. The transaction through which the organism and the environment become related as the knower and the known is an organic-environmental behavior. The knowing and the known are aspects of one event; they must be accepted in one system. The organisms and the objects of the environment are the component


74 Dewey and Bentley, Knowing and the Known, 64; Dewey, Experience and Education, 39-40; Experience and Nature, 6, 262-266; Quest for Certainty, 739; Democracy and Education, 183-186.

75 Dewey, Philosophy and Civilisation, 292.

76 Dewey, Experience and Nature, 9-29.

77 Dewey and Bentley, Knowing and the Known, 107-108, 118-119.

78 Ibid., 287.

79 Ibid., 290.

80 Ibid., 58.

81 Ibid., 123.
things of the cosmos; they are facts, they are events.\(^{62}\) They possess potentialities which may become actual.\(^{63}\) Knowing is just as much an event as an earthquake is. Knowing is among the actualities known.\(^{64}\) Things are activities, and activities are things.\(^{65}\)

There is, according to Dewey, no dualism of subject and object, mental and physical, in the transaction of the knowing and the known.\(^{66}\) There is no dualism of any kind.\(^{67}\) There is no mind or any other faculty, no mental entity between the knowing and the known.\(^{68}\) There is no substance.\(^{69}\) The principles of identity and contradiction do not apply to the cosmos, are not ontological.\(^{70}\) There is no cause in the sense of a productive force.\(^{71}\)

In giving an account of the facts in the world it is impossible, says the scholastic philosopher, to stop with transactions of the organism and the

\(^{62}\) Ibid., 59-60.


\(^{64}\) Dewey and Bentley, \textit{Knowing and the Known}, 67, 86.

\(^{65}\) Ibid., 123, 296-297.

\(^{66}\) Dewey, \textit{Logic}, 36; Dewey and Bentley, \textit{Knowing and the Known}, 134.


\(^{68}\) Dewey and Bentley, \textit{Knowing and the Known}, 54, 56, 63-84, 94, 120-121, 124, 293.

\(^{69}\) Dewey, \textit{Logic}, 127; \textit{Quest for Certainty}, 126, 128; Dewey and Bentley, \textit{Knowing and the Known}, 133, 303.


\(^{71}\) Ibid., 450-451.
objects of the environment. Certainly in such a transaction the organism is
the knower or the knowing, and the environment is the known. The question is
what does it mean for the organism to be the knower and the environment to be
the known. They are indeed two aspects of the same event. There is no knowing
unless there is the known and there is no known unless there is the knowing.
But still "knowing" means something different to the organism from what
"known" means to the environment. Dewey himself recognizes this, since he
declares that the organism knowing does nothing to the environment known by
it, while the environment does something to the organism.92

When two things interact, what occurs is not identical. When the
bat interacts with the ball by hitting it, the effect in the ball is mainly
motion in space, but in the bat it is mostly heat. Not all behaviors in the
world are interactive; there are one way actions. When an iron rod becomes
magnetic, a magnetic force surrounds it. When an insulated wire cuts those
magnetic forces an electric current flows through the wire. When an electric
current is passed through a poorly conducting metal, the metal becomes hot.
The knowledge or inquiry transaction is such a one way action. In this trans-
action the organism does the knowing or the reflective thinking. The environ-
ment does not do the reflective thinking, although the environment starts it,
is the object of it, and conditions its outcome.

Can this reflective thinking be identical with the organism? Let
us examine acting. Not moving exists but something moving exists. Similarly

not thinking reflectively exists but something thinking reflectively exists. Evidently, the organism and thinking reflectively are not identical facts but are really distinct ones. Now let us examine things. A ball is hit by the bat and moves in space. As the ball existed before it moved in space in the particular way the bat made it move, the ball and this motion in space are not identical. The ball can exist without this particular spatial motion; the motion in space, however, cannot exist by itself. Similarly, since the organism exists when it is not reflectively thinking, as it does when asleep, while thinking reflectively cannot exist by itself, the organism cannot be identical with thinking reflectively.

Not only cannot the organism and thinking reflectively, the ball and moving in space as caused by the bat, be identified but they belong to two orders of things. The organism exists in itself when not thinking reflectively, the ball exists in itself when not moving in space in the particular way caused by the bat, while neither the thinking reflectively nor the moving in space can exist in itself.

That there are two orders of things comes from Dewey's doctrine of potentiality. He says that observed data are potentialities, present conditions are potentialities, and that potentialities are existential powers, and that what is potential at one time may become actualized at another time.

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94 Ibid., 289.
95 Ibid., 288-289.
Observed data, present conditions are actual, while potentiality, although existing in the observed data or present conditions, is not actual but may become actualized. Therefore existing conditions and their potentialities must be really distinct and they belong to two orders of things: that which is actual and which is potentially actual. In scholastic terminology things of the cosmos are said to be a mixture of act and potency, a mixture of is actual in a definite way and of can be actual in another definite way.

Thus we have ontologically the dualisms in order of things, the dualism of actual and potential, and the dualism of subject and object in reflective thinking. In as much as reflective thinking may be successful or unsuccessful, there is a condition which is sometimes present in reflective thinking and sometimes not, but which is never present in the known.

Certainly ideas and meanings are not external objects and they must be in the knower who forms them. According to Dewey meanings are generalized through induction, resulting either in a generic idea which has existential content or in a universal idea which lacks existential content. The generic idea, even though it contains existential material, must exist in the knower, since he formed it by an act of induction; while the universal idea can be only in the knower who formed it, since it has no existential content. Dewey admits abstraction, regarding it as nonexistential as also mathematical subject matter is nonexistential. If abstractions and mathematical things are not

96 Ibid., 419.
97 Dewey, Logic, 117, 256, 259, 397; Dewey and Bentley, Knowing and
ontological, they are in the know as states of consciousness.

Therefore a theory of knowledge is necessary. Because man in perception faces reality, or has the objective thing as the terminus of knowing, the scholastic defends the validity of human knowledge. Still he will readily admit that in many complicated learning situations, due to the multiplicity of accidents (that is, non-substantial phenomena), the conclusions reached may be erroneous and need correction in the light of later investigation; he therefore disagrees with Dewey, who, building upon this precariousness in the sphere of particular activity, denies validity to all knowledge, and goes so far in his latest book as to substitute for the word "knowledge" a term denoting the ultimate in flux, "warranted assertibility."98

Dewey takes the fact of the rise of reflective thinking through evolution as evidence against the existence of kinds of things. The scholastics do not admit this inference. They hold that in any evolutionary happening causes, in the sense of producing-forces, operate, the existing things as second causes and God as first cause. Consequently, during the course of evolution really new kinds of beings could have resulted.

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The Principles of Identity, Contradiction, and Causality Are Ontological

Dewey holds that neither the principle of identity nor that of contradiction nor that of causality in the sense of a producing-force applies to existences or to the things in the world. 9 He even goes so far as to say that one cannot judge by inspection whether propositions are contradictory.100

Holding to intellectual knowledge both in the natural and supernatural sphere, the Catholic defends the ontological application of these principles as well as that of the principle of sufficient reason. "Theistic realism is founded, not on a mere postulate, but on intellectual grasp of intelligible reality in sense objects."101 The first object of the first act of the human intellect is the knowing of being or of reality in sense objects. That which the child perceives by taste as sweet, it apprehends by the intellect as being or reality. As we know the intelligible reality in perception through our intellect, we sense "at once its opposition to non-being, an opposition expressed by the principle of contradiction: Being is not non-being."102

If we consider the principle of contradiction positively, it becomes the principle of identity that "If a thing is, it is; if it is not, it is not" or "Being is being, non-being is non-being" or, in negative form, "Being

9 Dewey, Logic, 11, 3b3-3b6, 1b7-1b9, 151, 159, 160.
100 Ibid., 3b5-3b6.
102 Ibid., 31-32, 33, 10.
is not non-being." Thus the principles of contradiction and identity involve each other. 103

To this principle of contradiction or of identity is subordinated the principle of sufficient reason, which in its generality may be formulated thus: "Everything that is has its raison d'etre, in itself, if of itself it exists, in something else, if of itself it does not exist." But this generality must be understood in senses analogically different.

First. The characteristics of a thing, e. g., a circle, have their raison d'etre in the essence (nature) of that thing.

Secondly. The existence of an effect has its raison d'etre in the cause which produces and preserves that existence, that is to say, in the cause which is the reason not only of the "becoming," but also of the continued being of that effect. Thus that which is being by participation has its reason of existence in that which is being by essence.

Thirdly. Means have their raison d'etre in the end, the purpose, to which they are proportioned.

Fourthly. Matter is the raison d'etre of the corruptibility of bodies. 104

These principles are absolute objective laws of being, of all reality, of all that is or can be. They are also logical and experimental laws or laws of knowing or of inquiry. 105

If identity and contradiction do not apply to existing being, being need not be itself. The horse would at the same time exist and not

103 Ibid., 33, 10, 373.
104 Ibid.; 33-36.
105 Ibid., 33; Cory, Significance of Beauty in Nature and Art, 78, 138.
exist. A human person would at the same time be six feet tall and not six feet tall. Dewey, for example, would affirm and not affirm the value of the scientific method.106

And if in regard to propositions we cannot tell by inspection whether they are contradictory or not, we can never know whether propositions are contradictory or non-contradictory and consequently we cannot subject a contradiction to a test during an inquiry or cannot know that inquiry has tested it.

Since the realities in the world change they are actually something and can be something which they are not as yet, or they are mixtures of act and potency. Water is in potency to be oxygen and hydrogen, and when changed into them is in act. Such a being is therefore a composite being. The principles of identity and causality require that for such a being to exist it must be produced by another being.107 To say that an existing thing which does not have its existence of itself is uncaused is to say that an existing thing has existence both of itself and not of itself.108

The entire scientific inquiry is based upon the idea of cause and effect in the real sense of the cause producing the effect.109 The tremendous


107. Garrigou-Lagrange, C.F., Reality, 6, 7, 12, 76.

108. Ibid., 77.

activity in producing the atomic bomb was for the purpose of anticipating the 
Germans in making it so that its destructive force in the fissioning of the 
atoms would be turned against the Germans and the Japanese. The explosion 
of the bomb in the fissioning of the atoms was regarded as and is a force 
destructive of men and of things. It was an ontological means-to-an-end where 
the means, the bomb's explosion through the fissioning of the atoms, was the 
causal force and the end was the destruction of men and things effected by 
the causal force. It was not a mere logical means-to-an-end as the premises 
in the inference are the means to its conclusion.

In Scholastic Dualisms There Is Unity

The scholastics succeed in achieving unity of being in their dual-
isms. In all their dualisms the terms are related to each other as potency 
and act: in the being: existence actualizes the essence as a potency, in the 
substance the substantial act actualizes the pure potency, in the real thing 
the accidents actualize the potencies of the substance.

The doctrine of the soul is an "offshoot" of the theory of matter 
and form, also spoken of as pure potency and act. "This theory rests upon 
observation and is abundantly proved by several independent arguments. . . .

110 Ibid., 33.
111 Ibid., 25; Mercier, Manual of Modern Scholastic Philosophy, 
1, 62-68, 204-205, 678-679, 690, 691; 1, 73-77; 1, 82, 131-139; P. O. Connolly, 
"Abstraction and Modern Realism," The New Scholasticism, LXVII, January, 
The dynamic and substantial unity of man can only be explained by having recourse to form, which is the source of all unity in every natural body.112

Unity in acts is also present in scholastic and theological doctrines. Dewey's statement that pre-scientifically human acts were divided into isolated spiritual and physical acts and that moral acts were opposed to the operations of the sciences, does not apply to Catholic thinkers and still less does his complaint that man is regarded to be inherently too deprived to develop a proper morality.113 While Catholic thinkers do regard all the acts of the intellect and of the will as being spiritual,114 they integrate these acts with the sentient acts of knowledge, of feelings, and of emotions, with the vegetative acts, and with the motor acts. Because this is so, the sentient acts, vegetative acts, physical acts, have moral quality and have value in the reflective thinking of inquiry. Catholic thinkers hold that the natural morality of philosophy is developed by reflective thinking on God, man, and his environment; and supernatural morality by reflective thinking on revealed truths; incorporating into itself the morality of philosophy.115 They thus define the natural ability of man to evolve a philosophy and science.


st. Thomas teaches that man in the fallen state of nature is in the same condition as he would be in the state of pure nature unraised to the supernatural order—except for the fact that he is sometimes bothered or tempted by Satan and his angels.

The Course of Change of Things Is Open to Inquiry

Dewey also makes much ado about the changeableness of the world.

A Catholic necessarily admits the changeableness of the world, since he regards all beings except God as a mixture of act and potency, of what actually is and can be.

Motion, change, whether of lurching planets or hurtling beta particles, photosynthesizing plants or breathing, eating, growing, child-tearing animals, human reasoning or surging and swaying emotions, disintegration or reintegration of molecules, degeneration of a sinner or regeneration of a saint—all motion or change—is the transition from potentiality to actuality.

Although a Catholic will state that the changeableness of the world must be in the direction of the imitation of God's essence and of the ruling of His providence, he can know the nature of the possible or actual changes the same way that Dewey can know them. Also he can decide what the best

116 S. T., I-11, q. 86, aa. 1, 2, Basic Writings, ed. Pesis, II, 694-697.

117 1 Pet. 5, 8-9.


changes are by the same method that Dewey can decide them, although he would consider in his decision man's supernatural end, being desirous that as many persons as possible attain it.

For these changes to be made purposefully through reflective thinking, it is necessary that men should have the power to make free choices, choices which are initiated by them without being conditioned by external or internal conditions.

But if there is no free will, the needs are predetermined, the way they are grafted is predetermined, the consequences are predetermined, their reacting is predetermined, the modification is predetermined. Dewey, in short, banished the Absolute from the epiphan, only to find it turn up in our own sweet human nature.120

While a Catholic cannot go along with Dewey in the opinion that morality is changeable, depending upon the existing culture,121 he does admit that changes in culture involve the problem as to what the moral obligations in the changed circumstances are. For example, our economics of mass production and of limited obligation of corporations raise the question about the equitable use of profits for the perpetuation and expansion of business, salaries and wages, taxes and dividends.122


122 Pope Pius XI, Reconstructing the Social Order, 128, Pope Leo
Democracy As a Way of Life Is Not Acceptable to Catholics

For Dewey democracy is not only a political organization but also a way of life which ought to be made the basis of a system of morals. While a Catholic will accept democracy as a political organization and almost every thing that according to Dewey is involved in democracy as a way of life, he will not accept democracy either as a basis of morals or as a designation for moral life. In regard to democracy as a political system, differently from Dewey, he will accept literally the statements that God created all men, that He created them equal, that He endowed them with inalienable rights; that to secure men in the practice of their rights governments are necessary, and that the powers of the government are derived from the people. These statements agree with Catholic doctrines. In regard to equality St. Thomas says that all men are equal in liberty, but not in natural perfections. In regard to the powers of the government he states that the making of laws belongs either to the entire people or to the person who acts as the ruler. "The ruler has power and eminence from the subjects, and in the event of his despising them...


125 S. T., I-II, q. 90, a. 3, Basic Writings, ed. Paris, II, 746.
he sometimes loses both his power and position.  

Democracy as a way of life cannot be the foundation for a system of morals. The social order for men living in society is necessary for men as individuals; it is not primary to men as individuals but is subsequent to their obligations as individuals. Man's "conduct is ordered by his own nature as an immediate norm, and by the being upon whom his own nature depends as an ultimate norm."  

The social order cannot therefore be the basis of a moral system. Of course it is true that a social order is so necessary to man that without it he cannot survive as an infant and can hardly survive as an adult; were a human individual to live totally alone, he would have a rather limited opportunity to use his rights or his capacities. However the social order is for man, rather than man is for the social order.  

The descriptive designation of democracy as a way of life for a system of morals is wrong because many obligations apply to individuals as such and because a human being reaches the Eucharistic Vision as an individual person. It is not comparable to the descriptive phrase of commandments and counsels for the entire Catholic ethical system. As a key principle or ideal, it is still less comparable to Christ's words: "Love your neighbor as you love yourself. Love your enemies. Love one another as I have loved you."  

126 Sancti Thomas Aquinatis, Opera Omnia, Thomas XVI, Opusculum XXXVII, De Eruditione Principis, bk. 1, c. 7, New York, 1950, 397.


Church and State Are Complete Societies
in Their Own Respective Orders

Dewey is altogether wrong in what he says that the Church teaches or has taught in regard to political authority.130 Although Christ as the Son of God made man has the political right over the entire world, He has relinquished this right. "My kingdom is not of this world."131 The Pope as successor of Saint Peter has authority over the Church as a supernatural society: the authority to teach what Christ has taught and the Apostles after Him—including the Old Testament which He and they have taught—and the authority to make laws for the members of the Church in relation to their duties.132 As the head of the Vatican State the Pope has political authority there, but he has no political authority elsewhere.

Political authority is parallel to the religious authority of the Church, "Each authority in its kind is supreme. Each has fixed limits within which it is contained; ... there is an orbit traced out within which the action of each is brought into play by its own native right." Pope Leo XIII declared this in 1885 in his Encyclical, Immortale Dei. There he also clearly states the province of the two governments.

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130 Dewey, Problems of Men, 91.

131 John 18, 36.

Whatever in things human is of sacred character, whatever belongs (1) either of its own nature or (2) by reason of the end to which it is referred, to the salvation of souls or to the worship of God, is subject to the power of the Church .... Whatever is to be ranged under the civil and political order is rightly subject to the civil authority. 133

Since man is even less self-sufficient in the eternal order of life than he is in the temporal one, the Church is necessary to him.

By the very fact of being ordered to the Beatific Vision, he is parcel of a superior whole, of a State which is a more perfect unit than the terrestrial State .... [t]o need the terrestrial State for the normal development of our nature, for participation in the essence of humanity itself, whereas none can be made to share through sanctifying grace in the divine nature without belonging either visibly or invisibly to the Church. 134

There is a great difference between the foundation of the Church and of the State. In an address on October 2, 1946, Pope Pius XII declared that "the foundation of the Church as a society was accomplished from above downward, but political society originates from below upwards." Maritain says, "whereas the Pope in the Church is the vicar of Christ, the rulers in political society are the vicars of the people." 135

In his Encyclical, Summi Pontificatus, 1939, Pope Pius XII declares emphatically that the Church has no intention of interfering with the rights of the State.


135 Maritain, Man and the State, 184-185.
Against such suspicions we solemnly declare with Apostolic sincerity that . . . any such aims are entirely alien to that same Church, which spreads its maternal arms towards this world not to dominate but to serve. She does not claim to take the place of other legitimate authorities in their proper spheres. 136

The Church interferes neither with political authority nor with political loyalty. Indeed, membership in the Church requires from the citizen the loyalty to their government and from those holding political offices the faithful discharge of their political duties. 137

Seigel in Thought calls attention to the approval by Pope Pius XII of the desire of "more and better democracy." 138

By reason of the extent and nature of the sacrifices demanded of all citizens, in our time when the activity of the State is so vast and decisive, the democratic form of government seems to many as a natural postulate imposed by reason itself. Yet the cry: "more and better democracy" is a demand which can have no other meaning than to place the citizen more and more in a condition that permits him to have his own personal opinion, to express it and make it effective in a manner compatible with the common good. 139

However, the end of the State where its people are largely Christian implies "an actual—though doubtless always imperfect—materialization of the Gospel principles in terrestrial existence and social behavior." 140


140 Maritain, Man and the State, 55.
Some Catholics sympathised with Dewey in his opposition to the League of Nations,\footnote{Dewey, "Shall We Join the League?", \textit{New Republic}, XXXIV, 139-140.} and they agreed that an association of nations should have started with what already had been accomplished at the League, being gradually developed as conditions indicated.\footnote{Ibid., 140; Dewey, "The Approach to a League of Nations," \textit{Piel}, LXV, 311-312.} For the same reason these Catholics understood Dewey's very unsympathetic reaction toward the United Nations,\footnote{Dewey, "Democratic Versus Coercive International Organization," in \textit{Peace in Time of War} by Jane Addams, xvii, xviii.} while they had additional reasons to distrust it because of its communist and atheistic bias. Still many Catholics approve of the United Nations, as Dewey eventually did,\footnote{Dewey, \textit{The Public and Its Problems}, iv-vi.} and work actively to have religion included as a force for unity and peace.

\textbf{The Supernatural Is Dynamic}

There is nothing static in the supernatural order. In this life we come into possession of supernatural life either by being baptized or by making an act of perfect love of God or by dying for God rather than denying Him. As soon as we have reached the use of reason we live supernaturally by obeying the commandments and by practicing the counsels. In living supernaturally, we honor God, thank Him, make satisfaction for our sins, and obtain graces through the Mass which is the continuation of Christ's Sacrifice on
on the Cross. We have our sins forgiven initially through the Sacrament of Baptism and after Baptism through the Sacrament of Penance. These are the normal ways, but we can have our sins forgiven also through an act of perfect love of God and through martyrdom, although after Baptism the obligation remains of confessing mortal since once. Our supernatural life is brought to the level of adulthood through Confirmation. Those who are joined in marriage receive the Sacrament of Matrimony. Holy Orders perpetuates the Mass and the Sacraments by ordaining priests and consecrating bishops. Through the Sacraments we are either started out in supernatural life or are caused to grow in it—we also grow in it by living supernaturally.\textsuperscript{115} To live supernaturally means to practice the virtues.\textsuperscript{116}

While it is true that in the Beatific Vision we see the entire divine essence at once and not in succession,\textsuperscript{117} our intellect will not be in a static condition but in constant and highest activity. The Beatific Vision is the life of God, being eternal and perfect activity. In the Beatific Vision God knows His divine essence perfectly by way of vision in which act of knowing the Son is being begotten of the Father; and God loves His divine essence in which act of loving the Holy Ghost proceeds from the Father and the Son;


\textsuperscript{116} Cory, \textit{Significance of Beauty in Nature and Art}, 157-158.

\textsuperscript{117} C. G., III, CC, Basic Writings, ed. Pagis, II, 106-107.
and God is perfectly happy in this substantially secund knowing and loving of His divine essence. In attaining the Beatific Vision we participate in the eternal knowing and loving of the divine essence with the concomitant perfect happiness. In addition we have perfect social life with Christ, the angels, and the saints. We also will be able to engage according to our tastes in science or art activities. Indeed our supernatural life, whether here on earth or in heaven, is altogether dynamic.

**Dewey's Test is Applied to the Two Philosophies**

It has already been described how in the opinion of Dewey the scientific inquiry requires the theoretical solutions of philosophic problems to be tested. In line with this test Dewey gives the following description of the course of life of a human person according to his philosophy.

Man continues to live because he is a living creature not because reason convinces him of the certainty or probability of future satisfactions and achievements. He is instinct with activities that carry him on. Individuals here and there cave in, and most individuals sag, withdraw and seek refuge at this and that point. But man as man still has the dumb pluck of the animal. He has endurance, hope, curiosity, eagerness, love of action. These traits belong to him by structure, not by taking thought. Memory of past and foresight of future convert dizziness to some degree of articulateness. They illumine curiosity and steady courage. Then when the future arrives with its inevitable disappointments as well as fulfilments, and with new sources of trouble, failure loses something of its fatality, and suffering yields fruit of instruction not of bitterness. Humility is more demanded at our moments of triumph than at those of failure. For humility is not a childish self-deprecations. It is the sense of our slight inability even with our best intelligence and effort.

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to command events; a sense of our dependence upon forces that go their way without our wish and plan. Its purport is not to relax effort but to make us prize every opportunity of present growth.150

Dewey’s test favors the Catholic position. A Catholic accepts life because he regards it as a gift from God and as a means to Him in the beatific Vision. Because the world imitates God in His perfections and is created and ruled by Him, a Catholic is interested in its workings, extensiveness, and beauty.

He is enthusiastic over doing things: scientific investigation, artistic creation, any kind of production. Western culture, according to Dawson, was a Christian creation.151 “The civilization of the world is Christian civilization; the more frankly Christian it is, so much is it more true, more lasting and more productive of precious fruit.”152

In the growth of science Catholics had a large part, the names of many being scientific terms: Fabrius, 1537-1619; Galileo, 1564-1642; Torricelli, 1608-1647; Hedi, 1626-1698; Pascal, 1623-1662; Spallanzani, 1729-1799; Galvani, 1737-1799; Lavoisier, 1743-1794; Volta, 1745-1827; Avogadro, 1776-1856; Cannizaro, 1826-1910; Mendel, 1822-1881; Pasteur, 1822-1895; Fælopio, 1523-1562; Coulomb, 1736-1777; Ampere, 1775-1836. Omitting the last three, they form fifty-five per cent of the key men in science Conant discusses.153


151 Christopher Dawson, Education and the Crisis of Christian Culture, Chicago, 1949, 8.

152 Christopher Dawson, The Judgement of the Nations, New York, 1942, 142.

153 Conant, Science and Common Sense.
With Christ as his ideal, "Love one another as I have loved you," a Catholic is inclined to work for others and improve the social order. The sons of St. Benedict taught farmers how to improve husbandry, trained artisans in trade, and conducted schools. St. Vincent de Paul had the queen, nobles, ordinary people, work at correcting ills during peace and war. "Christian principles are capable of creating a better world. It is necessary to promote justice and charity in social life as well as in our individual lives."

Through their religion Catholics have a most important task in the world. A second century apologist in his Epistle to Diognetus says,

what the soul is in the body, that the Christians are in the world. The soul is spread through all members of the body and Christians throughout the cities of the world. . . . The soul is confined in the body, but itself sustains the body; and Christians are confined in the world as a ward, but themselves sustain the world. . . . God has appointed to them so great a post, and it is not right for them to decline it.

154 John 15, 12.


158 Dawson, Judgment of the Nations, 204.
A person cannot so arrange his affairs as to avoid all crosses, while success of his labors depends to a large extent on accidental factors beyond his control. A good Catholic finds comfort in suffering because thereby he imitates Christ and gains heaven. In failure he is not discouraged because the only success of absolute value is the attaining of the Beatific Vision and the glorious resurrection; this success depends not on accident but is entirely within his power, aided by God's grace which is never denied him.

Because of his supernatural philosophy a Catholic faces inevitable death calmly and cheerfully. He feels that way because the Son of God made man died for him to save him, and because the Sacrament of Penance forgives him his sins, Extreme Unction gives him strength and confidence, Holy Viaticum increases his love for God. There awaits him, either by entering heaven directly or through the purifying pains of purgatory, the Beatific Vision, the social life with Christ, His Blessed Mother, and the angels and the saints.

A Catholic extends his hope for the attainment of the Beatific Vision to the non-Catholic through God's grace enlightening him at the hour of his death. On the occasion of the death of Dewey on June 1, 1952 at the age of ninety-two years, an editorial in America said: "After a prolonged lifetime spent in scaring his vast reading public away from the 'tyranny of absolutes,' we hope he had abundant reason to praise the loveliness of the Divine Absolute he apparently did not know on this earth."159

CHAPTER X

Dewey's Leading Doctrines in Education Viewed in Relation to Scholastic Philosophy and Catholic Belief

Only those educational principles of Dewey are critically reviewed which have some bearing on scholastic philosophy or Catholic belief. Purely educational problems are not considered.

Aims of Education

Dewey tries to exclude any ultimate aim for the school, but actually he constitutes as its ultimate aim the continuation of the human society. Since the continuation of society involves the transmission of culture to the young receptors, one immediate aim of the school is this cultural transmission. For transmission Dewey desires the school to use culture in its best elements and to advance culture. Therefore the second immediate aim of the school is to improve this culture. The cultural transmission to the young people must be so done that they grow in the process and become good members of their society. Thus the ultimate and the two immediate aims have reference to society of which the ideal, Dewey says, is the democratic society. Hence

1 Dewey, Democracy and Education, 127-128, 1-2, 11, 3-9, 17, 16-17, 26, 27.
2 Ibid., 116, 100.
this democratic society is involved in the ultimate and immediate aims of the school.

Nowhere in his works does Dewey discuss education as a system from kindergarten through the elementary, secondary, and collegiate schools to the graduate school in relation to aims and the function of the elementary school and the secondary school and the college and the graduate school in realizing these aims.

A Catholic insists on the Catholic Church being involved in these aims. Of the culture to be transmitted an integral part and the dominating one is the Catholic Religion. The Catholic Church was introduced among the other elements of culture through Christ and the Apostles, and developed in regard to organization, theology, scripture, liturgy, laws, history, art, religious orders and communities, education and charitable institutions, economic and political relations.

The Church was for many centuries the center of cultural development. The fine and decorative arts have grown to a large extent in her service.

Speaking to two hundred Italian artists who are participating in Rome's sixth national exhibit, the Pontiff [Pope Pius XIII] said there is an "intrinsic affinity" between art and religion. In a certain sense this makes artists interpreters of the "infinite perfections of God, and especially of His harmony and beauty." Denying or suppressing relations between religion and art, "would result in minimizing art itself . . . . It cannot be contested that perhaps never as in them religious subjects has art reached its highest pinnacles." 3

The children of the Church have been very prominent in the development of the modern sciences. Catholic Universities have been pioneers in

3 Chicago Daily Tribune, April 9, 1952, pt. 1, p. 3.
establishing science departments. The first science society was formed at Rome in 1600 under the title of Accademia dei Lincei, a prototype of the organisation Bacon desired. A cooperative association was the Accademia del Cimento founded at Florence in 1657. Of this Academy, Conant says that it prospered from 1657 to 1667 in a completely Catholic country, let it be noted, after Galileo's famous trial and condemnation. . . . This early example of a flourishing scientific academy rather sticks in the throat of those who overemphasise the relation of science to Protestantism. 

In 1666 the French Academy was created by the Catholic King of France, Louis XIV, the Grand Monarch, and off and on received grants from the French monarchy. The Royal Society in England was begun a few years before the French Academy, but it never received anything but a royal blessing from the king or government.5

Our present system of education with its universities is the direct descendent of the educational movement started by Saint Alcuin under the patronage and impulse of Charlemagne.6

Consequently because of its active leadership in the development of culture the Catholic Church has the right to appear prominent in the acculturation of young people.7 In working for the improvement of our

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1 Conant, Science and Common Sense, 19, 76.
2 Ibid., 16-19.
4 William J. McGucken, S. J., The Catholic Way in Education,
culture the young people should make the Catholic Religion once again the
center and basis of all science, art, technology, economics, sociology,
politics, philosophy, and neighborhood and individual life. The inclusion
of scholastic philosophy in this plan is particularly important.

Christ is the Way, the Truth and the Life even for philosophers. So
we think the metaphysics of Aristotle and Aquinas would serve as the
ultimate form of education, establishing being according to its hierarchy
and value in truth in the mind, save the Being and knowledge which tran-
scends natural reason. Such a philosophy might unite the numerous
sciences and arts were it known and understood by the faculty of a school,
college or university.8

This is a large task, since the present ideas of human life, human
thought, and human culture have "thoroughly abandoned the high ideals of
civilization which had been laboriously acquired through long centuries of
Christian reflection, Christian practice, and Christian prayer."9 Consequently
the reconstitution of our world into a better one "will be made possible
only by bold vision, intelligent planning, and hard work."10

Besides these two immediate aims the school system has two others:
the formation of the young people for keeping culture in existence; and their

8 Milwaukee, 1931, 56-57.

9 James L. Hagerty, "The Form of Education: The Liberal Arts,"
The Philosophy of Christian Education, American Catholic Philosophical Assoc-
iation, 48th Regional Convention, April 16 and 17, 1931, San Francisco, 29;
by Frans de Vroome, New York, 1931, xxix.

10 Gerald B. Phelan, "Justice and Friendship," Thomist, 5, January,
1943, 154.

10 John S. Middleton, "Contemplation in America," Thomist, 5,
January, 1943, 220.
training to operate the schools. The realization of the second, third, and
fourth aims prepares the young people also for occupations of livelihood.
The first aim, the transmission of culture, applies to all the young people
and hence is usually termed general education. These four aims for education
are now being acknowledged. In discussing educational objectives, the Confer-
ence on Improving the Effectiveness of College Facilities made this statement:

Educational objectives must be definite, but they must not be narrowly
conceived. Among the functions which will be accepted in varying combi-
nations by different colleges are instruction $1$, research $1$, the
perpetuation of culture $2$, and acculturation $1$.\footnote{11 "Improving College Instruction," Higher Education, VII, January
15, 1951, 113.}

For a Catholic the fundamental basis of education, as of life is not
the continuation of human society but is the attainment by the learner of the
Beatific Vision with the glorious resurrection. The attainment of this end
involves the knowing of certain truths as well as the practice of the virtues
through the commandments and of the gifts of the Holy Ghost through the coun-
sels. The truths to be known and applied to living are religious doctrines
and practices, scholastic philosophy, civics, science, art, technology, voca-
tional occupation. The content of the virtues is philosophical and theologi-
cal, the motives basically supernatural, the method partly revealed and most-
ly developed experientially. The training in this complex knowledge and
virtuous living constitutes the cultural transmission for the first aim of
education.
Since the training here described has for its ideal the imitation of Christ, the first aim of education is frequently called the formation of Christ in the learner.

The proper and immediate end of Christian education is to cooperate with divine grace in forming the true and perfect Christian, that is, to form Christ Himself in those regenerated by Baptism. . . . For the true Christian must live a supernatural life in Christ, . . . and display it in all his actions.

Christian education takes in the whole aggregate of human life, physical and spiritual, intellectual and moral, individual, domestic, and social . . . to elevate, regulate and perfect it, in accordance with the example and teaching of Christ.

As already stated, the central part of the culture for transmission is the training of the young people in the knowledge, conviction, appreciation, and practice of the Catholic Religion. This training in religion should be the integrating factor of the acculturation of the young people. In regard to the realization of the other three aims the supernatural order is most important as the moral basis and ultimate aim and philosophy is the next in importance.

A Catholic will not admit that education for a democratic society is the fundamental function of the school as Dewey claims that it is.

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However, he does admit that it is essential for the schools to lead the pupils to appreciate our democratic government and to train them to take active part in our democracy by voting intelligently, promoting improvements, and obeying its laws.

Against Dewey's position of continuous change in educational goals, a Catholic defends their essential permanence and their intrinsic value. God has commanded all men to accept the redemption through Christ. The acceptance of the redemption involves growth, but it is a definite growth through definite religious doctrines and practices toward a definite end.

Education Through Experience

To a person who as a scholastic philosopher holds that the stimulus itself is the terminus of the act of perceiving, the principle of education through experience as inquiry is a source of confusion and is impractical. He will admit the use of the term of experience only for perceptual knowledge, and in this sense he will logically believe that the learner's education should as much as is practical be through personal experience. As he believes that inquiry through inference is peculiarly the human way of knowing and provides by far the greatest part of human knowledge he would like as much formal education as possible to be accomplished through inquiry. As an educator, however,


17 Matt. 17, 5; 2 Pet. 1, 17; John 2, 11-20; 12, 36, 44; 8, 21, 26; Mark 15, 16; John 15, 5-6; 6, 40, 47; 17, 3; Matt. 25, 34, 41.
he will be conscious of the limitations which the immaturity of the pupil and the want of sufficient time impose upon the use of inquiry in learning. 10

While the use of inquiry as a method of learning will increase as the young person advances to the graduate school, much of the subject matter will have to be accepted on authority. He will accept on authority most of history, science, literary works as classics, many of the facts in political science, economy, sociology, grammar, rhetoric.

Education a Social Process

Education, says Dewey, is a social process which requires a democratic social organization without economic, national, racial, cultural stratification. The pupils remain individualistic and yet the basic controls consist of the situations themselves in which they take part. 19 There is no quarrel with these principles.

The Church, speaking through her Supreme Pontiffs, urges and directs an awakening to the fact that there is an intrinsic relationship between spiritual ideals, religious principles and a sound social order. . . .

Affirmative action is required to prove that Christian principles are capable of creating a better world. It is necessary to promote justice and charity in social life as well as in our individual lives. 20

10 Redden and Ryan, Intercultural Education, 37.


20 Powers, C. S. V., ed., Papal Pronouncements on the Political Order, 2; Redden and Ryan, Intercultural Education, 55.
Catholics have definite things to say about what is a sound social order. It is sound if it is founded on the acceptance of the fact of creation with all that is therein implied of creaturehood, which is imbued with the consciousness that man is destined not for the things of earth but for union with God . . . . The test of any institution, of any group, of any government, is its potentiality for bringing men closer to God and thus increasing their human stature. 21

Method and Subject Matter

As far as a Catholic is concerned, Dewey's principle of continuity of experience has bearing mainly on the second immediate aim of formal education, namely the development of culture to higher levels; however, he would emphasize the relationship of things and specific methods. He thinks that the growth of the learner depends on continuously interrelating during the course of his education the knowledge acquired from personal perceptual experience, from the work of others, and from one's own inquiry and organizing this interrelated knowledge.

In disagreement with Dewey a Catholic would say that there is a hierarchy of values among studies. 22 He would arrange the studies in the following order: supernatural religion, philosophy, science, art, technology and trades. 23 Of course if a person becomes a carpenter, emphasis must be placed


23 Mortimer J. Adler, "The Order of Learning," The Philosophy of
on carpentry, but still the others precede it in value. For example, carpentry depends on art, science, and technology and the working at carpentry involves moral responsibility, morals being a part of supernatural religion. Consequently Dewey is right in claiming that for the vocational curriculum to be effective it must include cultural subjects, such as art, science, history, and literature.24

Educative Growth Through Personal Freedom

A Catholic agrees wholeheartedly with Dewey's statement that neither acting from principle and acting from interest nor discipline and freedom are opposed.25 If a Catholic understands that the Beatific Vision is the culmination of the supernatural life of grace, the Beatific Vision becomes the principle of his earthly life while it remains also the reward of his earthly life.

To advance in living according to supernatural morality is to advance in freedom. St. Thomas approves Aristotle's definition of the free man, "he is free who is his own master."26 Divine authority in the natural order and personal human freedom are one, for natural ethics has its immediate


24 Dewey, Democracy and Education, 302-305; Logic, 42.

25 Dewey, Democracy and Education, 407-409; How We Think, 67; Experience and Education, 55-56.

foundation in human nature and its final foundation in God. In the supernatural order, since supernatural authority is that of a father, the unity of divine authority and freedom is still more intimate. As a person advances in virtue by keeping the commandments and practicing the counsels, he grows in freedom. "Grace actualizes our liberty."27 When he has gained the Beatific Vision, his freedom will be complete. For the vision of God "brings with it, as a necessary complement, love and joy" in God, the supreme and perfect good.28

**Social Efficiency**

To a Catholic Dewey's doctrine that education must be for social efficiency and that culture is involved in the training is correct.29 For love of God and love of neighbor necessarily include working for social efficiency and for the advancement of culture.

The curriculum of the school should make provision for preparation for healthy family life, for fruitful living in the neighborhood, the community, the economic group, and in the nation, and for the development of an adequate understanding of international relationships. Thus a conscience will be formed for the welfare of humanity.30

There are better reasons for having private schools along with the public schools than Dewey's reason in the danger of a governmental ruling

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28 Ibid., 277.


class filling the young with ideas favorable to the ruling class. The most important is the fact that the education of youth belongs by natural, and also supernatural, right to the parents, and the existence of private schools gives them the opportunity to exercise this right. In the supernatural order the Church has over Catholics the supreme authority to educate, although she expects the parents to choose the schools.

Catholics are in hearty agreement with Dewey's desire that the schools bring the young of different national origins and races together.

Certainly the school should develop freedom of inquiry, discussion, and experience, and convince the learner of the value of this freedom, and it should operate the administration and instruction democratically. But even this freedom can be granted only in moderation. No doubt Dewey's principles are against allowing the teaching that it is right to kill anyone we like, to possess ourselves of other people's property, to seek sex pleasure as we please.

31 Dewey and Tufts, Ethics, 405-406, 273.
32 Commission on American Citizenship, Better Men for Better Times, 103.
34 Madden and Ryan, Intercultural Education, 53.
Philosophy and Education

Apart from the supernatural there is no Catholic philosophy, there is just a true philosophy. Adler correctly states that a philosophy is Catholic only in the order of efficient causality, not the order of formal causality, only in the historical and psychological order of its becoming, not in the epistemic order of its being. We know, as a matter of historical fact, that certain truths which reason is able to know, were not known by the great ancient pagans, and were only discovered later by the great Christian theologians. This is our factual basis for supposing the the light of faith, which the great Christian thinkers possessed, functioned psychologically to direct and help reason accomplish a work of discovery with respect to matters which can be called Catholic, then, only in the order of discovery, not in its logical structure, for as philosophy its ultimate principles are all rational and natural.\(^{37}\)

A Catholic will have nothing to do with Dewey’s making of the democratic society the criterion of education.\(^{38}\) Both philosophical and supernatural doctrines require the priority of the individual human person to society, whether social, economic or political. Individual human nature indicates the need for man and woman to live together in a social and political way and for economic purposes. Social organization in its political, social, and economic aspects exists for the individual to enable him as an individual to do his duty and to exercise his rights. If it is desirable that in economics the wage system be changed to a co-partnership,\(^{39}\) it is for the


\(^{39}\) Julian Lawrence Valine, S.J., "Is Catholic Education Democratic?"
purpose of elevating the dignity of the individuals and to provide for them a fuller life as individuals.

A Catholic will approve Dewey's idea of education "as the process of forming fundamental dispositions, intellectual and emotional, toward nature and fellowmen," if the last phrase read toward God, fellowmen, and nature.

The aim of Christian education is to provide those experiences which, with the assistance of divine grace, are best calculated to develop in the young the ideals, the attitudes, and the habits that are demanded for Christlike living in our American democratic society.

Philosophy and the supernatural are concerned with the nature, the origin, and the purpose or end of the world and especially of man in the world. Neither philosophy nor the supernatural determine what the natural sciences should be except the facts that the world originally came from God as the sole cause and that in the operations of things God acts as the First cause and things act as second cause, save in the production of the human soul in human generation which is created by God alone, and that originally


there were one single man and one single woman, the woman having been forced
from the man.

Dewey's definition of philosophy of education as "an explicit for-
mulation of the problems of the formation of right mental and moral habits
in respect to the difficulties of contemporary social life," is acceptable
if the last phrase is changed into "of contemporary individual and social
life so that men might attain their destiny, the Esatific Vision and a
glorious resurrection."

\textsuperscript{43} Dewey and Watson, "The Forward View: A Free Teacher in a Free
BIBLIOGRAPHY

I. BOOKS BY DEWEY


The book is based on ten lectures given for the William James Foundation at Harvard University in 1931. It is one of Dewey's three great expositions of a philosophic field, the other two being his Logic and his portion of Ethics.


The book contains the four essays by Dewey which had appeared in 1903 with contributions by others in Studies in Logical Theory edited by him, nine essays based on his articles in philosophical journals, and an introduction especially composed for the book.


It clarifies some of the principles in Democracy and Education.

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This book was composed under the editorship of Schilpp as a tribute to Dewey on his eightieth birthday, October 20, 1939. It contains a biography of Dewey by one of his daughters and articles of appreciation and criticism by seventeen well-known American and European thinkers, and a reply by Dewey. The appraisals and Dewey's rejoinder have clarified a number of major issues, although not by way of agreement.


The cooperative inquiry was occasioned by Dewey's article, "Some Questions about Value," in *The Journal of Philosophy*, XLI, 1944, 449-555, in which he developed a value theory on the basis of four fundamental questions formulated by him and challenged others to give their own views. Then by the autumn of 1945, no one had taken up the challenge, Leplay proposed to Dewey a cooperative inquiry. Dewey consented, suggesting for the study some persons who in their turn mentioned other persons. Fourteen of those most frequently nominated, among them Dewey, were selected.


The book brings out the interrelationship of freedom, culture, democracy for man, and its actualization in the United States.


The ideas of *Studies in Logical Theory* of 1903 were briefly summarized in the first edition of 1909 with special reference to education. In the second edition of 1933, some portions of the first edition are omitted, others are considerably expanded, chapters are rearranged. The chapter on "Recitation" is practically new.


This book is an expansion of the lectures delivered on the Raymond P. *West Memorial Foundation at Leland Stanford Jr., University in 1918, a new introduction and a conclusion having been added in 1930.

Eight articles from The New Republic reprinted with considerable new matter.


One unpublished essay, three monographs, and seven published essays from the years 1897 to 1909, some slightly and others considerably changed.


The book presents Dewey’s philosophy in selections from his writings up to 1936, two appearing for the first time—”The Economic Basis of the New Society” and ”The Unity of the Human Being.”


This complete positive treatment is Dewey’s culminating study in logic, beginning with his publication of Studies in Logical Theory through Essays in Experimental Logic and How We Think, “while basic ideas remain the same, there has naturally been considerable modification during the intervening years.”


The book consists of essays, largely on Dewey’s psychological ideas, of which all except the last had already appeared in journals or books between 1903-1930. Five of the essays are not listed in A Bibliography of John Dewey, 1882-1939, edited by Thomas in 1939.


The book is composed of essays which had already appeared in journals, one about 1896 and the remainder between 1935 and 1945. The introduction was especially written by Dewey for the volume in 1946.


In his preface of 1886 Dewey stated that he aimed to make this psychology an introduction to philosophy (Religion), using psychological investigations.


The book contains in revised form the lectures delivered in January, 1926, on the La Folll Foundation of Kenyon College, Gambier, Ohio. There is an introduction written by Dewey in 1946.


It comprises lectures delivered at the Imperial University of Japan in Tokyo during February and March, 1919 and was originally published in outline form in the *Journal of Philosophy*, XVI, June, 1919. The introduction, 3-28, was written in 1916, while the text remained unchanged.


The first three chapters which comprised the first edition of the book
are lectures delivered by Dewey in 1899 in connection with his laboratory school at the University of Chicago. The remaining chapters are based on his contributions to the Elementary School Record, long out of print.


Dewey, John, and Arthur F. Bentley, Knowing and the Known, Boston, 1949.

The introduction and eleven of the twelve chapters and the appendix appeared originally in journals between 1931 and 1949. The twelfth chapter was written for this book. Chapters 1, 7, and 9 were composed by Bentley; chapter 10 and the appendix by Dewey; the others were signed jointly.


Part II, 171-324, and chapters XVI and XVII of Part III, 347-414, are by Dewey; the remainder of the book is by Tufts.

II. ARTICLES BY DEWEY


Dewey, John, "Shall We Join the League?" The New Republic, XXXIV, March 28, 1923, 139-140.


III. OTHER BOOKS


Butler, J. Donald, Four Philosophies and Their Practice in Education and Religion, New York, 1951.


Maritain, Jacques, Man and the State, Chicago, 1951.


Maritain, Jacques, Some Reflections on Culture and Liberty, Chicago, 1933.

Maritain, Jacques, The Things That Are Not Caesar's, New York, 1930.


Naughton, James W., S. J., Pius XII on World Problems, New York, 1953.


Pope Pius XII, Summi Pontificatus, Encyclical Letter on the Function of the State in the Modern World, October 20, 1939.


Prindeville, C. A., C. M., Chapters in Religion, St. Louis, 1962.


Stern, Frederick Martin, Capitalism in America, New York, 1950.


Thomas Aquinas, Sanctorum Opera Omnia, Thomas VI, Commentae in Quatuor Libros Sententiarum, Magistri Petri Lombardi, New York, 1940.

Thomas Aquinas, Saint, Compendium of Theology, translated from the Latin by Cyril Vollert, S. J., St. Louis, 1946.


Wagner, Donald C., Social Reformers, New York, 1935.


Ward, Leo, C. S. C., Values and Reality, New York, 1925.


IV. OTHER ARTICLES

Chicago Daily Tribune, April 9, 1952, pt. 1, p. 3.


Maling, Julian Lawrence, S. J., "Is Catholic Education Democratic?" reprinted from Abstracts of Doctor's Dissertations, No. 15, Columbus, Ohio, 1935.


V. UNPUBLISHED MATERIAL


The dissertation submitted by Sister M. Dolores Schorsch, O. S. E., has been read and approved by four members of the Department of Education.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the dissertation is now given final approval with reference to content, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the Degree of Doctor of Education.

April 17, 1973

Signature of Adviser