

Functionalist Economics: A Deweyan Approach

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Abstract

In this study, we have tried to identify two different approaches for dealing with social problems and issues. The first one is causal explanation which is retrospective, static and physical. The other one, functional analysis, is prospective, dynamic, and normative. Institutions are the main subject of economics. Human social-institutional reality has a common underlying structure and these structures are matters of status functions. We proposed a method which aims at efficacy of these functions using intelligence rather than assuming these functions as intrinsic and trying to grasp the reality from without by a rationality apparatus. The aim of this article is to show that, Dewey's Logic provides us with this alternative functionalist approach in a comprehensive way.

Keywords: John Dewey; Functional Analysis; Causal Explanation; Intelligence; Methodology.

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Introduction

In classical philosophy, two epistemologies were held to provide "proof of the truth or falsity of a knowledge claim about (independent) reality. The first, rationalism, begins by acknowledging the existence of fundamental, universal, fixed laws of reality. The second epistemology is empiricism. In further development, a third epistemology, positivism; blends rationalism and empiricism by lapsing one into the other. Modern economics fundamentally relies on the essentialist epistemologies of rationalism and empiricism. So rationalist and empiricist epistemologies have been used to confirm the truth or scientificity of economic knowledge. Positivism and the "progress of knowledge" schools verify their knowledge products by appealing to one or both classical epistemologies to prove the meaningfulness, value, correctness,

and truth of the theory. On the basis of rationalist and empiricist epistemologies which in tandem form the methodology of positivism, economics rests its claim to science. Rationalists discover the Absolute by peeling away layer after layer of meaning until the irreducible essence is revealed. Their proofs are accepted according to how well a theory's logical conclusions follow from accepted premises.

Modern economic thought is organized around the quest for universal economic truths of human society, through objectively obtained facts and formally modeled logic. Most economists see their object of study as amenable to the techniques and tools of science. The task of science has been to disclose the laws of operation of the natural and social worlds. This type of knowledge and its conformity to these laws, they believe, will result in a stable, well-

ordered society in which unknowable future events can be predicted with a high degree of expectation and, therefore, controlled. It implies the "imagined whole" and also the view that essences exist and are knowable. Therefore, they seek to discover formally the true laws of economic motion. The search for these laws proceeds according to the rules of scientific practice.

North (2005) argues that the discipline of economics is made up of a static body of theory that explores the efficiency of resource allocation at an instant of time and under the restrictive assumptions of frictionless markets. But, the first constraint of static analysis hinders severely our ability to analyze and improve the performance of economies in the world of continuous change. And, in fact, the employment of static theory as a source of policy recommendation in a setting of dynamic change is a

prescription for the policies producing unanticipated and undesirable results. In contrast to standard theory that draws its inspiration from physics, modeling the process of change must derive its inspiration from evolutionary biology but in contrast to Darwinian theory in which the selection mechanisms are not informed by beliefs about the eventual consequences, human evolution is guided by the perceptions of the players in which choices—decisions—are made in the light of these perceptions with the intent of producing outcomes downstream that will reduce the uncertainty of the organizations—political, economic, and social—in pursuit of their goals. Economic change, therefore, is a deliberate process shaped by the perceptions of the actors about the consequences of their actions. He, further notes that, the economic paradigm—neo-

classical theory—was not created to explain the process of economic change. We live in an uncertain and ever changing world that is continually evolving in new and novel ways. Standard theories are of little help in this context. Attempting to understand economic, political, and social change (and one cannot grasp change in only one without the others) requires a fundamental recasting of the way we think (North, 2005).

In this study, using the main ideas of the great American philosopher John Dewey along with John Searle, also assuming that most of the theories of social sciences, especially of economics rely on causal explanations for analysis of social phenomena, we intend to introduce an alternative approach based on functional analysis and integrate it with Dewey's own logic to give a comprehensive method for

dealing with social problems. First, we make a comparison between functional and causal approaches in a basic way. Then, explain the logical structure of social reality. In the next three sections, we give a more detailed account of some of the curial concepts in functions that are intelligence, values and the relation of means-ends. We conclude the article after giving a brief account of Dewey's Logic.

Functional Analysis V. Causal Explanation

Human beings, along with certain other species, have the capacity to impose functions on objects, where the imposition of function creates an intentionality-relative phenomenon. Typically an object will have a function imposed on it when the object is used for a certain purpose. The point is that functions are always intentionality-relative. This is hidden

from us by the fact that in biology we often discover functions in nature. We discover, for example, that the function of the heart is to pump blood (something that was unknown until the seventeenth century), or that the function of the vestibular ocular reflex is to stabilize the retinal image. But when we discover functions in nature, what we are doing is to discover how certain causes operate to serve certain purposes where the notion of purpose is not intrinsic to mind-independent nature, but is relative to our sets of values. So we can discover that the heart pumps blood, but when we say that the function of the heart is to pump blood, we take it for granted that life, survival, and reproduction are positive values, and that the functioning of biological organs serves these values. But, where do the values come from? The clue that there is a normative component to the

notion of function is that once we have described something in terms of function we can introduce a normative vocabulary. We can say things like, “This is a better heart than that heart,” “This heart is malfunctioning,” “This heart is suffering from disease.” We cannot do any of these things for stones: stones do not suffer from stone malfunction or stone disease; but if we assign a function to a stone—such as being a paperweight or projectile—we could make evaluative appraisals. Quoting Searle, “a function is a cause that serves a purpose.” And the purposes have to come from somewhere; in this case, they come from human beings. In this sense, functions are intentionality-relative and therefore mind dependent (Searle 2010).

It is important to note that functions as a matter of fact, involve the cooperation of organism and

environment. Breathing, for example, is an affair of the air as truly as of the lungs; digesting is an affair of food as truly as of tissues of stomach. We may shift from the biological to the mathematical use of the word function, and say that natural operations, like breathing and digesting, acquired ones like speech and honesty, are functions of the surroundings as truly as of a person. They are things done by the environment by means of organic structures or acquired dispositions. The same air that under certain conditions ruffles the pool or wrecks buildings, under other conditions purifies the blood and conveys thought. The outcome depends upon what air acts upon. There are specific good reasons for the usual attribution of acts to the person from whom they immediately proceed. But, to convert this special reference into a belief of exclusive ownership is as misleading

as to suppose that breathing and digesting are complete within the human body. So, we must bear in mind that functions are ways of using and incorporating the environment in which the latter has its say as surely as the former (Dewey, 1983).

Dewey held that, deliberate dishonest pursuit of self-interest is as much conditioned upon social opportunities, training and assistance as is the course of action prompted by a beaming benevolence. The difference lies in the quality and degree of the perception of ties and interdependencies; in the use to which they are put. The objects aimed at, the rewards sought for, are what they are because of social admiration, prestige, competition and power. These are reflexes of social conditions. (Ibid) All deliberate choices and plans are finally the work of single human beings. By thinking in terms of causal forces, the

conclusion has been drawn from this fact that society is an aggregate of unrelated wants and wills. Under the influence of the fallacy that the problem of the society concerns causal forces, individualism, as an *ism*, as a philosophy, has been generated. While the doctrine is false, it sets out from a fact. Wants, choices and purposes have their locus in single beings; behavior which manifests desire, intent and resolution proceeds from them in their singularity. But only intellectual laziness leads us to conclude that since the form of thought and decision is individual, their content, their subject-matter, is also something purely personal. The action of everything is along with the action of other things. The "along with" is of such a kind that the behavior of each is modified by its connection with others. There are trees which can grow only in a forest.

Electrons, atoms and molecules exemplify the omnipresence of conjoint behavior (Dewey, 1984b).

Furthermore, to Dewey, morals are as much a matter of interaction of a person with his social environment as walking is an interaction of legs with a physical environment. The character of walking depends upon the strength and competency of legs. But it also depends upon whether a man is walking in a bog or on a paved street. While Dewey believed that in morals, we thought of moral dispositions as belonging exclusively to a self. The self is thereby isolated from natural and social surroundings. Recognition of the analogy of moral action with functions uproots the causes which have made morals subjective and "individualistic." Honesty, chastity, malice, peevishness, courage, triviality, industry, irresponsibility are not private possessions of a person. They

are working adaptations of personal capacities with enviroing forces. They can be studied as objectively as physiological functions, and they can be modified by change of either personal or social elements. In fact, some activity proceeds from a man, and then it sets up reactions in the surroundings. Others approve, disapprove, protest, encourage, share and resist. Even letting a man alone is a definite response. Envy, admiration and imitation are complicities. Neutrality is non-existent. Conduct is always shared; this is the difference between, it and a physiological process. It is not an ethical "ought" that conduct should be social. It is social, whether bad or good (Dewey, 1983).

Dewey wrote: "Causes for an act always exist, but causes are not excuses. Questions of causation are physical, not moral except when they concern future consequences. It is as

causes of future actions that excuses and accusations alike must be considered. By killing an evil-doer or shutting him up behind stone walls, we are enabled to forget both him and our part in creating him. Society excuses itself by laying the blame on the criminal; he retorts by putting the blame on bad early surroundings, the temptations of others, lack of opportunities, and the persecutions of officers of the law. Both are right, except in the wholesale character of their recriminations. But the effect on both sides is to throw the whole matter back into antecedent causation, a method which refuses to bring the matter to truly moral judgment. For morals has to do with acts still within our control, acts still to be performed. No amount of guilt on behalf of the evil-doer absolves us from responsibility for the consequences upon him and others of our way of treating him, or from our

continuing responsibility for the conditions under which persons develop perverse habits.’ (Ibid) Dewey also draws a very important distinction between the physical and the moral question. The former concerns what has happened, and how it happened. To consider this question is indispensable to morals. Without an answer to it, we can neither tell what forces are at work nor how to direct our actions so as to improve conditions. Until we know the conditions which have helped form the characters we approve and disapprove, our efforts to create the one and do away with the other will be blind and halting. But, the moral issue concerns the future. It is prospective. The moral problem is that of modifying the factors which now influence future results. To change the working character or will of another we have to alter objective conditions which enter into his

habits. Our own schemes of judgment, of assigning blame and praise, of awarding punishment and honor, are part of these conditions. (Ibid) He notes the eternal dignity of labor and art lies in their effecting that permanent reshaping of environment which is the substantial foundation of future security and progress. Individuals flourish and wither away like the grass of the fields. But the fruits of their work endure and make possible the development of further activities having fuller significance. For however much has been done, there always remains more to do. We can retain and transmit our own heritage only by constant remaking of our own environment. Piety to the past is not for its own sake nor for the sake of the past, but for the sake of a present so secure and enriched that it will create a yet better future. In fact, Dewey insists that there must be

change in objective arrangements and institutions. We must work on the environment not merely on the hearts of men. To think otherwise is to suppose that flowers can be raised in a desert or motor cars run in a jungle. Both things can happen and without a miracle, but only by first changing the jungle and desert (Dewey, 1983).

Dewey stressed that, every ideal is preceded by an actuality; but the ideal is more than a repetition in inner image of the actual. It projects in securer and wider and fuller form some good which has been previously experienced in a precarious, accidental, fleeting way. Taste, appreciation and effort always spring from some accomplished objective situation. They have objective support; they represent the liberation of something formerly accomplished so that it is useful in further operation. Accordingly, we do not use the present to control the future.

We use the foresight of the future to refine and expand present activity. In this use of desire, deliberation and choice, freedom is actualized. Dewey further directs us to the fact that, we are held accountable by others for the consequences of our acts. They visit their like and dislike of these consequences upon us. On the other hand, we foreknow how others will act, and the foreknowledge is the beginning of judgment passed on action. These two facts, that moral judgment and moral responsibility are the work wrought in us by the social environment, signify that all morality is social; not because we ought to take into account the effect of our acts upon the welfare of others, but because of facts. Others do take account of what we do, and they respond accordingly to our acts. Their responses actually do affect the meaning of what we do. In sum, our conduct is socially conditioned

whether we perceive the fact or not. Dewey continues to note that, "Individualism" is not found in human original nature but in his habits acquired under social influences. It is found in his concrete aims, and these are reflexes of social conditions (Dewey 1983). Such theories merely reduplicate in a so-called causal force the effects to be accounted for. They are of a piece with the notorious potency of opium to put men to sleep because of its dormitive power (Dewey 1984b). Appeal to a gregarious instinct to account for social arrangements is the outstanding example of the lazy fallacy and at best account for everything in general and nothing in particular (Ibid) .

Causal explanations are of necessity directed to what is already there; to what extent is finished, complete. Functional analysis by way of control looks to the future, to pro-

duction. In this sense, ideas are statements not of what is or has been but of acts to be performed. 'The conversion of the logic of reflection into ontology of rational being is thus due to arbitrary conversion of an eventual natural function of unification into a causal antecedent reality' (Dewey 1981). When various opinions all spring from a common and shared error, one is as good as another and the accidents of education, temperament, class interest and the dominant circumstances of the age decide which is adopted. Reason comes into play only to find justification for the opinion which has been adopted, instead of to analyze human behavior with respect to its consequences and to frame politics accordingly. It is an old story that natural philosophy steadily progressed only after an intellectual revolution. This contributes in abandoning the search

for causes and forces and turning to the analysis of what is going on and how it goes on. Political philosophy has still in large measure to take to heart this lesson. The failure to note that the problem is that of perceiving in a discriminating and thorough way the consequences of human action (including negligence and inaction) and of instituting measures and means of caring for these consequences has led to production of conflicting and irreconcilable theories (Dewey, 1984b) .

In a functional approach, Dewey identified any instrument which is to operate effectively in existence must take account of what exists, from a fountain pen to a self-binding reaper, a locomotive or an airplane. But “taking account of,” paying heed to, is something quite different from literal conformity to what is already in being. It is an adaptation of what previously existed to accomplishment

of a purpose. Thus, the supposed immutable law supposed to govern phenomena becomes a way of transacting business effectively with concrete existences, a mode of regulation of our relations with them...They function as intellectual tools or instrumentalities. As Dewey identifies, the main task of intelligence is to grasp and realize genuine opportunity and authentic possibilities. The structure of a machine can be grasped in view of the function it fulfills and the relations which the parts of the machine sustain to one another, in connection with the work the machine as a whole performs (the consequences it affects). Clarity and order of perceived objects are introduced when forms are judged in relation to operations, and these are in turn in relation to work done. The improvement or worsening in use of a concrete machine and the worth of

an invention are judged by reference to efficiency in accomplishment of a function. The more adequately the functional relation can be apprehended in the abstract, the better the engineer can detect defects in an existent machine and project improvements in it. Machines are evolved in human experience, they are interactions of previously existing physical existences. They depend on their efficacy upon other and independent natural existences; Moreover, inventors are guided by the inherent logic of existing machines; by observation of the consistency of relationships which parts of the machine bear to one another and to the pattern of the entire machine. An invention may thus result from purely mathematical calculations. Nevertheless, the machine is still a machine, an instrumental device for regulating

interactions with reference to consequences (Dewey, 1984a).

In fact, nature is intelligible and understandable. There are operations by means of which it becomes an object of knowledge, and is turned to human purposes, just as rivers provide conditions which may be utilized to promote human activities and to satisfy human need. *William James* was well within the bounds of moderation when he said that looking forward instead of backward, looking to what the world and life might become instead of to what they have been, is an alteration in the “seat of authority” (Dewey, 1984a).

The Logical Structure of Social Reality¹

In social subject-matters, we are talking about the mode of existence of social facts, social objects, and

1. This section is a brief draw from Searle theories of social ontology, for full account of that please refer to Searle 2010, and Searle 1995,

social processes and events. Roughly speaking, as Searle puts it, features of social reality requires conscious agents for its existence in the way that facts about money, property, government and marriage require conscious agents. He wisely points out that *language* is the presupposition of the existence of other social institutions in a way that they are not the presupposition of language. To put it simply, Institutions such as money, property, government and marriage cannot exist without language, but language can exist without them. So, language is constitutive of institutional reality, and all human institutions are essentially linguistic. This fact gives a logical structure to the immensely complex and immensely various modes of social existence in a way analogous with the natural sciences. For example the underlying principle in the different physical appearance

of a bonfire and a rusty shovel is oxidization. So, there is collective intentionality of status functions in enormous differences of social reality that we want to explain in more detail. "Intentionality" is the word philosophers use to describe that feature of minds by which mental states are directed at or about objects and states of affairs in the world. Collective intentionality is the intentionality that is assigned by different people, and just as there can be shared intentions to do things, so there can be shared beliefs and shared desires. Further, the collective intentionality enables the collective assignment of a function. As it was said, humans, and some animals, have the faculty to assign functions to objects, where the object does not have the function intrinsically but only in virtue of the collective assignment. Sometimes, the collective assignment of function

is imposed on a person or an object such as money where the function is not performed in virtue of the physical features of the person or the object, but rather, in virtue of the fact that the collective intentionality assigns a certain status to that person or object. It is this movement whereby we create status functions that marks the difference between social realities in general and institutional reality. Human institutions are matters of status functions. Searle states the logical form of the assignment of a status function when it becomes regular, and thus a matter of a rule, is that of the constitutive rule of the form, X counts as Y in context C. Thus, such and such counts as a twenty dollar bill in our society. Barak Obama counts as President of the United States. All of these are of the form X counts as Y in context C. Searle points out that the constitutive rule

just mentioned has two formal properties that are truly remarkable. First, it can iterate upwards indefinitely. Thus, making such and such noises counts as uttering a sentence of English, and uttering such and such a sentence of English counts as making a promise and uttering such and such a promise counts as undertaking a contract. Furthermore, the structure not only iterates upward, but also, it expands laterally also indefinitely. We never just have one institutional fact, but we have a series of interlocking institutional facts. Thus, I do not just have money, but I have money in my bank account at a certain financial institution, it is placed there by my employer and I use it to pay my credit card debts and my state and federal income taxes. So status functions are the vehicles of power in society. We accept the status functions and by accepting them , we

accept a series of obligations, rights, responsibilities, duties, entitlements, authorizations, permissions, requirements, etc. Searle calls them deontic powers both of positive and negative kinds. For instance, if something is my property, I have a certain authority over it, and I am required by law to pay the taxes on it. What we have in society is a set of deontic power relations. These deontic structures make possible desire-independent reasons for action. If I have a piece of property, and other people recognize that it is my property, then they have desire-independent reasons for not violating my property rights, and so on with rights generally. It is this combination; status functions, deontic powers, and desire-independent reasons for actions that give us the specific human forms of socialization. In order for those obligations, requirements, and duties

to exist, they have to be represented in some linguistic or symbolic form. The deontology can continue to exist after its initial creation and indeed even after all the participants involved have stopped thinking about the initial creation. A crucial function of language is in the recognition of the institution as such. Thus, in order for me to own a particular item of property, or to have a particular dollar bill, there has to be a general institution of private property and money. Exceptions to this are cases where an institution is being created *de novo*. But these general institutions, in which the particular instances find their mode of existence, can only exist insofar as they are recognized and that recognition has to be symbolic, linguistic in the most general sense.

In further development, Searle quoting Barry Smith, points out that there are some institutions that have

what Smith calls “free-standing Y terms” where you can have a status function, but there is no physical object on which the status function is imposed. For example, the existence of physical objects of currency, coins and bills, is not essential to the functioning of money. All that is essential is that there should be a set of formal relationships that are capable of being represented symbolically. In the case of money, all that is essential is that there should be a set of numerical values attaching to individuals and a set of formal relations between these whereby they can use their numerical assignment to buy things from other individuals, pay their debts, etc. Status functions are, in general, matters of deontic power and in the cases like money, the deontic power can go directly to the individuals in question. My having a thousand dollars is not a matter of

my having a wad of bills in my hand but my having certain deontic powers. I now have the right, i.e. the power, to buy things, which I would not have if I did not have the money. In such cases, the real bearer of the deontology is the participant in the economic transactions. The physical objects dollar bills are just markers for the amount of deontic power that the players have. In a more general account, Searle continues to say that the basic power creation operator in society is that we accept (S has power (S does A)). What then, exactly, is the relationship between the two formulae X counts as Y in C and we accept (S has power (S does A))? The answer is that, of course, we do not just accept that somebody has power, but we accept that they have power in virtue of their institutional status. For example, satisfying certain conditions makes someone President of the United

States. This is an example of the X counts as Y in C formula. But once we accept that someone is President of the United States, so we also accept that he has the power to do certain things. He has the positive power to command the armed forces, and he has the negative power, i.e. the obligation, to deliver a state of the union address. In this case we accept that S has power (S does A) because $S=X$, and we have already accepted that X counts as Y, and the Y status function carries with it the acknowledged deontic powers.

By creating institutional reality, we increase human power enormously. By creating private property, governments, marriages, stock markets and universities, we increase the human capacity for action enormously. But the possibility of having and satisfying desires within these institutional structures – for example, the desire

to get rich, to become president, to get a PhD, to get tenure- all presuppose that there is a recognition of the deontic relationships. Without the recognition, acknowledgment, and acceptance of the deontic relationships, our power is worthless. So, the creation of the general field of desire-based reasons for action presupposed the acceptance of a system of desire independent reasons for action. This is true both of the immediate beneficiaries of the power relationships, the person with the money or the person who has won the election, and of the other participants in the institution.

Rationality V. Intelligence

Modern economic thought is organized around the quest for universal economic truths of human society, through objectively obtained facts and formally modeled logic.

Most economists see their object of study as amenable to the techniques and tools of science. So when it is said that savings equals investment, it is in the same tone of voice as it is said force equals mass times acceleration. The task of science has been to disclose the laws of operation of the natural and social worlds. Knowledge of and adherence to these laws, they believe, will result in a stable, well-ordered society in which unknowable future events can be predicted with a high degree of expectation and, therefore, controlled. These natural laws, however, are supposed to be inherently fixed; a science of social phenomena and relations is equivalent to discovery of them. Once discovered, nothing remains for man but to conform to them; they are to rule his conduct as physical laws govern physical phenomena. They are the sole standard of

conduct in economic affairs. After the vision exists in the mind, effort is expended confirming the existence of the economy in the real concrete. The social and cultural conditions of existence of the reproduction of human society are the material out of which a vision of the economy emerges (Wilson, 1996). Dewey argues that laissez-faire is the logical conclusion according to this approach. As organized society to attempt to regulate the course of economic affairs, to bring them into service of humanly conceived ends, is regarded to be a harmful interference (Dewey, 1984a). Reason comes into play only to find justification for the opinion which has been adopted, instead of to analyze human behavior with respect to its consequences and to frame politics accordingly (Dewey, 1984b).

Dewey observes that if man in his quest of understanding is a

participator in the natural scene, a factor in generating the things to know, the fact that man participates as a factor in social affairs is no more the barrier to knowledge of them. On the contrary, a certain method of directed participation is a precondition of his possession of any genuine understanding. Human intervention for the sake of effecting ends is no interference, and it is a means of knowledge. This approach affects an exchange of reason for intelligence. In this manner, “reason” has the technical meaning given to it in classic philosophic tradition. It designates both an inherent immutable order of nature, and the organ of mind by which this universal order is grasped. In both respects, reason is with respect to changing things the ultimate fixed standard—the law physical phenomena obey, the norm human action should obey. For the marks of

“reason” in this sense are necessity, universality, and superiority to change. Intelligence on the other hand is associated with judgment; that is, with selection and arrangement of means to effect consequences and with choice of what we take as our ends. A man is intelligent not in virtue of having reason which grasps first and indemonstrable truths about fixed principles in order to reason deductively from them to the particulars which they govern, but in virtue of his capacity to estimate the possibilities of a situation and to act in accordance with his estimate. In the large sense of the term, intelligence is as practical as reason is theoretical. Wherever intelligence operates, things are judged in their capacity of signs of other things. In some cases, we can forestall a happening; desiring one event to happen rather than another, we can

intentionally set about institution of those changes which our best knowledge tells us to be connected with that we are after. What has been lost in the theoretical possibility of exact knowledge and exact prediction is more than compensated for by the fact that the knowing which occurs within nature involves possibility of direction of change. This conclusion gives intelligence a foothold and a function within nature which "reason" never possessed. That which acts outside of nature and is a mere spectator of it is, by definition, not a participator in its changes. Therefore, it is debarred from taking part in directing them. Action may follow but it is only an external attachment to knowing, not an inherent factor in it. As a mechanical addendum, it is inferior to knowledge (Dewey 1984a). Interactions go on anyway and produce changes. But Dewey argues

that apart from intelligence, these changes are not directed. They are effects but not consequences, for consequences to be implied means deliberately to be employed. When an interaction intervenes directing the course of change, the scene of natural interaction has a new quality and dimension. This added type of interaction is intelligence (Ibid).

The distinction between physical - social and moral objects is a distinction of methods of operation not of kinds of reality, the latter deals with those relations which are of the broadest scope. (Ibid) The engineer, the artist, the historian, the man of affairs attains knowledge in the degree they employ methods that enable them to solve the problems which develop in the subject-matter they are concerned with. (Ibid) Desire, purpose, planning, choice, have no meaning save in conditions where something is at stake, and

where action in one direction rather than another may eventuate in bringing into existence a new situation which fulfills a need.(Ibid) The distinction between wide and narrow use of reason has already been noted. The former holds a fixed end in view and deliberates only upon means of reaching it. The latter regards the end-in-view in deliberation as tentative and permits, nay encourages the coming into view of consequences which will transform it and create a new purpose and plan (Dewey 1983). Reasonableness is a necessity, because it is the perception of the continuities that take action out of its immediateness and isolation into connection with the past and future. Intelligence liberates man from the bondage of the past, due to ignorance and accident hardened into custom. It projects a better future and assists man in its

realization and its operation is always the subject to test in experience (Ibid).

In Dewey's words, intelligence is not something possessed once for all. It is a quality of some acts, those which are directed; and directed action is an achievement not an original endowment. (Dewey 1984a) It is in constant process of forming, and its retention requires constant alertness in observing consequences, an open-minded will to learn and courage in re-adjustment (Dewey 1982). Intelligence is concerned with foreseeing the future so that action may have order and direction. It is also concerned with principles and criteria of judgment. (Dewey 1983) In contrast with this experimental and re-adjusting intelligence, it must be said that *reason* as employed by historic rationalism has tended to carelessness, conceit, irresponsibility, and rigidity—in short absolutism.

Historic rationalism has often tended to use *reason* as an agency of justification and apologetics, or, as was noted by Bacon, *reason* assumes a false simplicity, uniformity and universality, and opens for science a path of fictitious ease. This course results in intellectual irresponsibility and neglect (Dewey, 1982).

In short, Intelligence within nature means liberation and expansion, as reason outside of nature means fixation and restriction. In fact, Dewey regarded the organism as a part of the natural world and, its interactions with it are genuine additive phenomena. While the development of symbols or a natural occurrence, these interactions are directed towards anticipated consequences, they gain the quality of intelligence and knowledge accrues in this way. Problematic situations when they are resolved then gain the meaning of all the

relations which the operations of thought have defined. Things that were casually effective in producing experienced results became means to consequences; these consequences incorporate in themselves all the meanings found in the causes which intentionally produce them (Dewey 1984a). For Dewey, the agent's actions creatively constitute its information in its transactions with its context. They are emergently 'constituted' as a consequence of creative transaction (Mousavi and Garrison 2003). Situations into which change and the unexpected enter, Dewey argues, are a challenge to intelligence in order to create new principles. Social situations alter, and it is also foolish not to observe how old principles actually work under new conditions, and not to modify them so that they will be more effectual instruments in judging new cases. In fact, the

choice is not between throwing away rules previously developed and sticking obstinately by them. The intelligent approach is to revise, adapt, expand and alter them. The problem is one of continuous and vital re adaptation (Dewey, 1983).

The Place of Values

A pivotal problem in philosophy is the relation that exists between beliefs on the nature of things owing to natural science vis – à- vis the beliefs about values, using that word to designate whatever is taken to have rightful authority in the regulation of conduct. The issue involves nothing less than the problem of directed reconstruction of economic, political and religious institutions. As Dewey points out, ‘Man has beliefs which scientific inquiry vouchsafes, beliefs about the actual structure and processes of things; and he also has beliefs about

the values which should regulate his conduct. The question of how these two ways of believing may most effectively and fruitfully interact with one another is the most general and significant of all the problems which life presents to us’ (Dewey 1984a).

Traditional view of values embraces the Cartesian dualisms that presume the epistemological separation of the “subjective” realm of “values” from the “objective” world of “facts.” Such intellectual constructs make it possible to keep “values” in their proper place, namely, in the lofty, unaccountable world of metaphysical speculation. They belong to the subjective realm of settled beliefs, beyond the reach of objective inquiry. This tendency to keep values out of the reach of inquiry is as prominent in contemporary philosophical positivism as it is in traditional moral

philosophy. In their attempt to strip away the metaphysical foundations of epistemology, the positivists (and later, the logical empiricists) have attempted to protect science from the corrupting influence of normative propositions by denying that they have no “meaning” at all. (Bush 2009) According to one strain of positivism, values enter the human enterprise as little more than the expression of emotional dispositions (Bush 2009; Ayer 1946; Stevenson 1944). As their “meaning” presumably cannot be established through “verification,” they lie outside the realm of knowledge and cannot be subjected to objective inquiry (Bush 2009).

Empirical theories retain the notion that values are constituted by liking and enjoyment; to be enjoyed and to be a value are two labels for one and the same fact. Since science has extruded values from its objects,

these empirical theories do everything possible to emphasize their purely subjective character of value. The objection is that the theory in question holds down value to objects *antecedently* enjoyed, apart from reference to the method by which they come into existence; it takes enjoyments which are causal, because they are unregulated by intelligent operations in order to be values in and of themselves. To say that something is enjoyed is to make a statement about a fact, something already in existence; it is not to judge the value of that fact. There is no difference between such a proposition and one which says that something is sweet or sour, red or black. It is just correct or incorrect and that is the end of the matter. But to call an object a value is to assert that it satisfies or fulfills certain conditions. It involves a prediction; it contemplates a future in which the

thing will continue to serve; it *will* do. Operational thinking needs to be applied to the judgment of values just as it has now finally been applied in conceptions of physical objects. Experimental empiricism in the field of ideas of good and bad is demanded to meet the conditions of the present situation. As long as we do not engage in this inquiry, enjoyments (values if we choose to apply that term) are casual; they are given by “nature,” not constructed by art (Dewey 1984a).

When theories of values do not afford intellectual assistance in framing ideas and beliefs about values that are adequate to direct action, the gap must be filled by other means. If intelligent method is lacking, prejudice, the pressure of immediate circumstance, self-interest and class-interest, traditional customs, institutions of accidental historic origin, are *not* lacking, and

they tend to take the place of intelligence. Thus, we are led to our main proposition: *Judgments about values are judgments about the conditions and the results of experienced objects; judgments about that which should regulate the formation of our desires, affections and enjoyments.* For whatever decides, their formation will determine the main course of our conduct, personal and social character. This element of direction by an idea of value applies to science as well as anywhere else. For every scientific undertaking, a constant succession of estimates is posed; such as “it is worth treating these facts as data or evidence; it is advisable to try this experiment; to make that observation; to entertain such and such a hypothesis; to perform this calculation,” etc. The scientific revolution came about when material of direct and

uncontrolled experience was taken as problematic; as supplying material to be transformed by reflective operations into known objects. The notion of an act whether of sense or thought which supplied a valid measure of thought in immediate knowledge was discredited. Consequences of operations became the important thing. So, without the intervention of thought, enjoyments are not values but problematic goods, becoming values when they are re-issued in a changed form by intelligent behavior. Implicitly and not explicitly holds the view that values are already well known and all which is lacking is the will to cultivate them in the order of their worth. In fact the most profound lack is not the will to act upon goods already known but the will to know what they are. Only dogmatism, as Dewey asserts can suppose that

serious moral conflict is between something clearly bad and something known to be good, and that uncertainty lies wholly in the will of the one choosing. He continues to note that most conflicts of importance are conflicts between things which are or have been satisfying, not between good and evil. And to suppose that we can make a hierarchical table of values in a large scale once for all, a kind of catalogue in which they are arranged in an order of ascending or descending worth, is to indulge in a gloss on our inability to frame intelligent judgments in the concrete. Or else it is to dignify customary choice and prejudice by a title of honor (Ibid).

In his formulation of pragmatic instrumentalism, John Dewey offered a fundamentally different way of thinking about values. He rejected both the moral absolutism of

traditional philosophy and the void value of contemporary positivism. Dewey's conception of value is non-absolutistic, non-foundational, and free of any suggestion of inherent qualities (or essences). His conception of value is contextual and located within the existential realm of "knowing and doing" (Bush 2009). For Dewey, values are not merely subjective or unrelated to facts or closed to rational investigation and critical reconstruction. Values simply are a particular kind of fact. Similarly, judgments about values are simply judgments about particular kinds of experienced things. In this light, a value is a relation (and not a quality) between an organism and its environment, and to judge that something is or is not valuable is to determine that it does or does not stand in a particular relation to the interests of the organism, the live

creature. Here, two points are crucial. First, to note that values are relations (and the relations of some subject to its environment) is not to render them subjective, private, inaccessible or quasi-mystical. Value judgments are the ones about the presence or absence of particular existential relations. Those relations either exist at a given time or place or they do not exist then and there. Dewey stressed that desires and enjoyments become only values as, and only after, they have been informed and transformed by experimental inquiry. Values do not antedate such inquiry; they are its products, its results. The mere desire to drink bleach, for example, does not establish that drinking bleach is valuable. Rather, the values are made only as experimental inquiry - what Dewey called 'the method of intelligence' - that establishes its

conditions and outcomes (Stuhr, 2003).

The alternative to this definition, classification and systematization of satisfactions just as they happen to occur, according to Dewey is judgment of them by means of the relations under which they occur. If we know the conditions under which the act of liking, of desire and enjoyment, takes place, we are in a position to know what the consequences of that act are. It is not a dream to be possible to exercise some degree of regulation of the occurrence of enjoyments which are of value. Realization of the possibility is exemplified, for example, in the technologies and arts of industrial life—that is, up to a definite limit. Men had the desire of heat, light, and the speed of transit and communication beyond what nature provides itself. These events have been attained not by lauding

the enjoyment of these things and preaching their desirability, but by study of the conditions of their manifestation. Knowledge of relations have obtained the ability to produce what has been followed, and enjoyment has been ensued as a matter of course (Dewey 1984a).

Dewey criticizes the view that assumes all desires and dispositions, all habits and impulses are the same in quality and the sole “problem” or doubt is as to the amount of pleasure or pain that is involved, because such a view is equivalent to the notion that no real or significant conflict among them is possible. He asserts that, good consists in the meaning that is experienced, belonging to an activity when conflict and entanglement of various incompatible impulses and habits terminate in a unified orderly release in action. This human good, being a conditioned fulfillment upon

thought, differs from the pleasures or instinct of an animal. We also remain animal as long as we do not think. Honesty, industry, temperance, justice, like health, wealth and learning, are not goods to be possessed as they would be if they expressed fixed ends to attain. They are directions of change in the quality of experience. Growth itself is the sole moral “end” (Dewey 1984a).

When economists were told that their subject-matter was merely material, they naturally thought they could be “scientific” only by excluding all reference to distinctively human values. But, for Dewey, the thing which concerns all of us as human beings is precisely the greatest attainable security of values in concrete existence. The main consideration in achieving concrete security of values lies in the perfecting of action’s methods.

Regulation of conditions upon which results depend is possible only by doing, yet only by doing which has intelligent direction, which takes cognizance of conditions, observes relations of sequence, and which plans and executes in the light of this knowledge (Ibid) .

The Means–Ends Schema

In social science, the tendency is to assume that the facts are just out there, waiting to be discovered and then assembled into appropriate generalizations. In an attempt to avoid the error just noted of treating social problems as primarily moral problems that are immune to scientific methods, social scientists sometimes go to the other extreme and try to avoid all evaluations remaining value-neutral. Thus, they take ends as fixed. Their job is to determine not the ends but only facts and the means to those ends. For if

the “correct solution is already given,” then one only has “to find the facts” to prove it, reducing “inquiry at its very best to the truncated and distorted business of finding out means for realizing objectives already settled upon” (Dewey 1986). Dewey contended that successful inquiry requires that all three elements—problems, facts, and ends—must be open to examination and allowed to influence each other. None are privileged; all are related in a conjugated manner to one another. In the midst of this discussion of the errors associated with fixing on one of these three aspects of social inquiry, Dewey concisely stated the controlling idea of his instrumentalist logic of inquiry. “Judgment which is actually judgment (that satisfies the logical conditions of judgment) institutes means-consequences (ends) in strict

conjugated relation to each other. Ends have to be adjudged (evaluated) on the basis of the available means by which they can be attained just as much as existential materials have to be adjudged (evaluated) with respect to their function as material means of effecting a resolved situation, For an end-in-view is itself a means, namely, a procedural means” (Dewey 1986, Eldridge 2002)

The doctrine of fixed ends, as Dewey asserts, not only diverts attention from examination of consequences and the intelligent creation of purpose, but, since means and ends are two ways of regarding the same actuality, it also renders men careless in their inspection of existing conditions. An aim not framed on the basis of a survey of those present conditions which are to be employed as means of its realization simply throws us back

upon past habits. We then do not do what we intended to do but what we have got used doing, or else we thrash about in a blind ineffectual way. The result is failure. (Dewey 1983) He notes that, the ideal relationship of means to ends exists as a formal possibility determined by the nature of the case even though it cannot be considered as a thought, or much less realizable in fact. One may conceive of an engine which has a one-hundred per cent efficiency, although no such ideal is even remotely approached in actuality. It subsists as a possibility, and as a possibility is necessary in its formal structure. That is to say, the conditions which have to be met and fulfilled in the idea of a machine having an efficiency of one hundred per cent are set by the necessities of the case; they do not alter with defects in our apprehension of them (Dewey 1984a). Every such

idealized object is suggested by something actually experienced, as the flight of birds suggests the liberation of human beings from the restrictions of slow locomotion on dull earth. It becomes an aim or end only when it is worked out in terms of concrete conditions available for its realization that is in terms of "means". A fancy becomes an aim, in short, when some past sequence of known cause-and-effect is projected into the future, and when by assembling its causal conditions we strive to generate the same result. We have to fall back upon what has already happened naturally without design, and study it to see how it happened which is what is meant by causation. This knowledge joined to wish creates a purpose. As Dewey identifies, many men have doubtless dreamed of ability to have light in darkness without the trouble of oil, but the picture remained a dream

until Edison studied all that could be found out about such casual phenomena of light, and then set to work to search out and gather together the means for reproducing their operation (Dewey 1983).

For Dewey, ends are ends-in-view or aims. They arise out of natural effects or consequences which in the beginning are hit upon, stumbled upon so far as any purpose is concerned. Men like some of the consequences and dislike others. Henceforth (or till attraction and repulsion alter) attaining or averting similar consequences are aims or ends. These consequences constitute the meaning and value of an activity as it comes under deliberation. Meantime of course imagination is busy. Old consequences are enhanced, recombined, modified in imagination. Invention operates. Actual consequences that are effects which have happened in the past,

become possible future consequences of acts still to be performed. This operation of imaginative thought complicates the relation of ends to activity, but it does not alter the substantial fact: Ends are foreseen consequences which arise in the course of activity and which are employed to give activity added meaning and to direct its further course. They are in no sense ends of action. In being ends of deliberation, they are redirecting pivots in action. Men shoot and throw. At first, this is done as an "instinctive" or natural reaction to some situation. The result when it is observed gives a new meaning to the activity. Henceforth, men in throwing and shooting think of it in terms of its outcome; they act intelligently or have an end. Liking the activity in its acquired meaning, they not only "take aim" when they throw instead of throwing at random, but

also they find or make targets at which to aim. This is the origin and nature of “goals” of action. They are the ways of defining and deepening the meaning of activity. Having an end or aim is thus a characteristic of present activity. It is the means by which an activity becomes adapted when otherwise it would be blind and disorderly, or by which it gets meaning when otherwise it would be mechanical. In a strict sense, an end-in-view is a means in present action; present action is not a means to a remote end. Men do not shoot because targets exist, but they set up targets in order that throwing and shooting may be more effective and significant. Thus, the doctrine of the isolated, complete or fixed end limits intelligent examination, encourages insincerity, and puts a pseudo-stamp of moral justification upon success at any price (Dewey 1983).

Dewey's Logic

For Dewey, inquiry is the controlled or directed transformation of an indeterminate situation into one that is determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole. The term “unified whole” in Dewey’s definition refers to the normative aspect of his logic. He contends that practical inquiry begins with an end to be accomplished and then searches for the means by which it may be achieved. In his view of causal relations, the effect is the end to be reached; the differential means to be employed constitute its cause when they are selected and brought into interaction with one another. The import of the causal relation as one of means-consequences is thus prospective. Once established, it is employed retrospectively. If in order to kill a man, a bow and arrow are

employed, then, when a man is found dead with an arrow in his heart, death is called the effect and the shooting of the arrow the cause. He notes that in all inquiries in which there is an end in view (consequences to be brought into existence) there is a selective ordering of existing conditions as means, and, if the conditions of inquiry are satisfied, a determination of the end in terms of the means are available. He criticizes the retrospective approach as purely theoretical, while the prospective one involves experimentation which integrates “theory” and “practice”. Dewey says that experience is a matter of functions and habits, of active adjustments and readjustments, of coordination and activities, rather than of states of consciousness that mysteriously represent the real (Seigfried 2002).

For Dewey, the causal law is designated in terms of consequences of execution of its function. By use of such a figure of speech, a rod of metal is called a lever; a particular arrangement of a piece of wood and metal is called a hammer, etc. A common conception is that an event can be picked out as the antecedent of the event in question, and that this antecedent is its cause. For example, it would be said that the antecedent of the death of the murdered person is a shot fired from a revolver by another person. But examination shows that this event is not temporally antecedent, leaving out the matter of its being the antecedent. For the mere firing of the shot is not sufficiently close in temporal sequence to be a “cause” of death. A shot may have missed the man entirely. Only a bullet which actually enters some vital part of the organism in such a way that the

organic processes cease to function is “causally” connected with the occurrence of death. Such an event is not an antecedent of the event of dying, because it is an integral constituent of that event rather than the final cause (Dewey 1986).

In Dewey’s logic, inquiry begins with a precognitive sense that something is amiss. There is a sensed awareness that what is the case ought not to be the case. This launches inquiry into a “problematic situation,” which is a cognitive construct. The conduct of inquiry involves the resolution of the problematic situation into a clearly perceived coherent whole, or “end in view,” which provides the direction for the actions that must be taken in resolving the problem. The transition to a unified whole is achieved by means of operations of two kinds which are in functional correspondence with each other. One

kind of operations deals with ideational or conceptual subject-matter. This subject-matter stands for possible ways and ends of resolution. It anticipates a solution, and is marked off from fancy because, or, in so far as, it becomes operative in instigation and direction of new observations yielding new factual material. In sum, they are proposals and plans for acting upon existing conditions to bring new facts to light and to organize all the selected facts into a coherent whole. The other kind of operations is made up of activities involving the techniques and organs of observation. Since these operations are existential they modify the prior existential situation, bring into high relief conditions previously obscure, and relegate to the background other aspects that were at the outset conspicuous. The ground and criterion of the execution of this work of emphasis, selection

and arrangement is to delimit the problem in such a way that existential material may be provided with which to test the ideas that represent possible modes of solution. Symbols, defining terms and propositions are necessarily required in order to retain and carry forward both ideational and existential subject-matters in order that they may serve their proper functions in the control of inquiry. Otherwise the problem is taken to be closed and inquiry ceases. One fundamentally important phase of the transformation of the situation which constitutes inquiry is central in the treatment of judgment and its functions. The transformation is existential and hence temporal. The pre-cognitive unsettled situation can be settled only by modification of its constituents. Experimental operations change existing conditions. Reasoning, as such, can

provide means for effecting the change of conditions but by itself cannot affect it. Only execution of existential operations directed by an idea in which ratiocination terminates can bring about the re-ordering of environing conditions required to produce a settled and unified situation. Since this principle also applies to the meanings that are elaborated in science, the experimental production and re-arrangement of physical conditions involved in natural science is further evidence of the unity of the pattern of inquiry. The temporal quality of inquiry means, then, something quite other than that the process of inquiry takes time. It means that the objective subject-matter of inquiry undergoes temporal modification (Dewey 1986).

Stuhr (2002) points out that Dewey's account of logic as the theory of inquiry and his account of

the nature and pattern of inquiry signaled a far-reaching revolution in logic, even if this signal has been missed by most professional “logicians” and epistemological hangers-on preoccupied with truth tables and formal systems, Polish notation, modalities, and possible worlds. While the full benefits of Dewey’s revolution may be incalculable, the strengths of this approach are many. He briefly summarized some points regarding the strength of Dewey’s logic; Dewey’s account of logic as the theory of inquiry is anti-dualistic, ant foundational, ant abstractionist, so that inquiries always arise within particular contexts, times, and places. Dewey’s view of logic is antistatic. There is no guarantee, Dewey wrote, that the conclusion of an inquiry will remain settled: “The attainment of settled beliefs is a progressive matter; there is no belief

so settled as not to be exposed to further inquiry. (Dewey 1986) Dewey’s logic is operational. So, the subject matter of logic is determined operationally. Logical forms, Dewey claimed, are postulational. Similarly, essences and accidents have only functional, not ontological, status. The other point is that logic is the theory of inquiry understood as reconstructive. Inquiry is existentially transformative. Next, as the theory of inquiry, logic is temporal. Its subject matter is thus irreducibly relative to time— and to a span of time rather than a single moment, since inquiry cannot be instantaneous. This temporality of inquiry replaces concern for truth with concern for warrant, just as, in another context, taking time seriously replaces concern for the good with concern for particular ends in view (Stuhr 1997). Also, his theory of logic is interdisciplinary in

its orientation. As such, it stands in sharp contrast to the familiar compartmentalized, epartmentalized, supposedly mutually independent disciplines and areas of investigation. Dewey observed that there is an urgent need for breaking down these conceptual barriers so as to promote cross-fertilization of ideas, and greater scope, variety, and flexibility of hypotheses. The last point is that, Logic, as the theory of inquiry, is contextual. This context, Dewey stressed in early chapters of his Logic, is biological and cultural (and it is in this cultural context and in his account of the role of reasoning in his “pattern of inquiry,” that Dewey detailed the special significance of language). In other words, inquiry is not an exercise in pure reason (Dewey 1986).

Conclusion

There are two different outlook for

analyzing social phenomena, functional analysis and causal explanation. The former analysis is prospective, dynamic, normative, while the latter one is retrospective, static and physical. As such, human social-institutional reality has a common underlying structure and these structures are matters of status function declaration, or in the broad sense of the word, functional, so it has some implications for social theories. First, it is a mistake to treat their subject matters, such as money and other such instruments as if they are natural phenomena like the phenomena studied in physics, chemistry, and biology. Second, it is a mistake to treat different branches of the social sciences, such as sociology and economics, for example, as if they deal with fundamentally different subject matters. Third, the aim of social sciences should be the search for

“efficient causes” instead of final causes. We should bear in mind that, extrinsic relations instead of intrinsic forms, constitutes the aim of science. The aim is the search for those relations upon which the occurrence of real qualities and values depends, so as we can regulate their occurrences. Their validity is a matter of their efficacy in performance of this function. Function and status in meeting conditions is a different matter from bare existence. To take advantage of conditions after they have come into existence is one thing; to create them for the sake of an advantage would be something different. So, for example there exists a difference in kind between business calculation of profit and loss and deliberation upon what purposes to form. In contrast with rationality, as Dewey (1984a) holds, intelligence asserts a potentiality in preference to an

actuality. Nature is capable of being understood. But the possibility is realized not by a thinking mind rather but by operations conducted with them, operations which give it new relations summed up in production of a new individual object. Nature has intelligible order as its possession in the degree in which we by our own overt operations realize potentialities contained in it. The change from intrinsic rationality in the traditional sense to an intelligibility to be realized by human action places responsibility upon human beings.

Dewey (1984b) held that when we look erroneously, we naturally do not find what we are looking for. The worst of it is however, that looking in this manner, to causal forces instead of consequences, the outcome of the looking becomes arbitrary. There is no check on it. “Interpretation” runs wild. Hence,

the variety of conflicting theories and the lack of consensus of opinion appear. One might argue a priori that the continual conflict of theories is itself the proof that the problems have been wrongly posed. What is needed to direct and make fruitful social inquiry is a method which proceeds the basis of the interrelations of observable acts and their results. Such is the gist of the method Dewey proposed to follow.

To Dewey, inquiry has a common structure or pattern, in spite of the diversity of its subject matters and variety of techniques for dealing with these subjects. The subject matter of social problems is existential. Therefore, in the broad sense of "natural," social sciences are branches of natural science. One of the obvious source of the difficulty lies in the fact that the subject-matter of the latter is so complex and so intricately

interwoven that the difficulty of instituting a relatively closed system (a difficulty which exists in physical science) is intensified. According to the common pattern proposed by Dewey, an original indeterminate situation is transformed into a problem by means of reasoning that controls the operation of facts and meanings so as to generate and assess a solution to the problem that produces a new, determinate, unified situation.

References

- [1]. Ayer, A.J., *Language, Truth and Logic*. New York 1957.
- [2]. Burke, Tom. (2002). "Prospects for mathematizing Dewey's logical theory" in F. Thomas Burke, D. Micah Hester, and Robert B Talisse ; foreword by Larry Hickman (ed.) *Dewey's Logical Theory : New Studies and Interpretations*, Vanderbilt University Press
- [3]. Dewey, J., 1920. 1982. *Reconstruction in philosophy*. Reprinted in John

- Dewey: The middle works, Vol. 12: 1899-1924, ed. Jo Ann Boydston. Carbondale and Edwardsville: Southern Illinois University Press.
- [4]. Dewey, John and Bentley, Arthur (1989). "Knowing and the known", in Jo Ann Boydston (ed.) *The Later Works of John Dewey, Vol. 16*, Carbondale: Southern Illinois University Press
- [5]. Dewey, J. (1985). "Ethics", in Jo Ann Boydston (ed.) *John Dewey: The Later Works, Vol. 7*, Carbondale: Southern Illinois University Press.
- [6]. Dewey, J. (1983). "Human nature and conduct", in Jo Ann Boydston (ed.) *John Dewey: The Middle Works, Vol. 14*. Carbondale: Southern Illinois University Press.
- [7]. Dewey, J. (1986). "Logic: the theory of inquiry", in Jo Ann Boydston (ed.) *John Dewey: The Later Works, Vol. 12*. Carbondale: Southern Illinois University Press.
- [8]. Dewey, J. (1981). "Experience and nature", in Jo Ann Boydston (ed.) *John Dewey: The Later Works, Vol. 1*. Carbondale: Southern Illinois University Press.
- [9]. Dewey, J. (1972). "The reflex arc concept in psychology", in Jo Ann Boydston (ed.) *John Dewey: The Early Works, Volume J*. Carbondale: Southern Illinois University Press, pp. 96-109.
- [10]. Dewey, J. (1987). "Art as experience", in Jo Ann Boydston (ed.) *John Dewey: The Later Works, Volume 10*. Carbondale: Southern Illinois University Press
- [11]. Dewey, John (1910). *The Influence of Darwin on Philosophy and Other Essays*, New York: Henry Holt and Company.
- [12]. Dewey, John (1984). "The quest for certainty: a study of the relation of knowledge and action". in Jo Ann Boydston (ed.) *John Dewey: The Later Works, Vol. 4*. Carbondale: Southern Illinois University Press.
- [13]. Eldridge, Michael. (2002). "The teachers union fight, and the scope of Dewey's logic" in F. Thomas Burke, D. Micah Hester, and Robert B Talisse ; foreword by Larry Hickman (ed.) *Dewey's Logical Theory : New Studies and Interpretations*, Vanderbilt University Press
- [14]. Khalil, E.L., 2003. "The context problematic, behavioral economics and the transactional view: an introduction to John Dewey and

- economic theory'. *Journal of Economic Methodology*, 10(2), pp.107-130.
- [15] Klamer, A., 2003. A pragmatic view on values in economics. *Journal of economic methodology*, 10 (2), pp.191-212.
- [16] Mousavi, S. and Garrison, J., 2003. Toward a transactional theory of decision making: creative rationality as functional coordination in context. *Journal of Economic Methodology*, 10 (2), pp.131-156.
- [17] North, D., 2005. Understanding the process of economic change. *SPE, Storia del pensiero economico. Fascicolo 2, 2005*, (2), pp.1000-1004.
- [18]. Ryan, F.X., 2003. Values as consequences of transaction: commentary on'Reconciling homo economicus and John Dewey's ethics'. *Journal of Economic Methodology*, 10(2), pp.245-257.
- [19] Searle, J., 2010. *Making the social world: The structure of human civilization*. Oxford University Press.
- [20] Searle, J., 1995. *The Construction of Social Reality* The Free Press. New York.
- [21]. Burke, F.T., 2002. *Dewey's logical theory: new studies and interpretations*. Vanderbilt University Press.
- [22] Shook, J.R., 2003. Entrepreneurship and values in a democratic and pragmatic economics: commentary on'A transactional view of entrepreneurship'. *Journal of Economic Methodology*, 10(2), pp.181-190.
- [23] Stevenson, Charles L. (1944). *Ethics and Language*. New Haven: Yale University Press.
- [24] Stickers, K.W., 2003. Transaction, development, and capacity: commentary on'Toward a transactional theory of decision making'. *Journal of Economic Methodology*, 10(2), pp.157-160.
- [25]. Khalil, E.L., 2003. A transactional view of entrepreneurship: a Deweyan approach. *Journal of economic Methodology*, 10(2), pp.161-179.
- [26]. Stuhr, J.J., 2003. Pragmatism about values and the valuable: commentary on'A pragmatic view on values in economics'. *Journal of Economic Methodology*, 10(2), pp.213-221.
- [27]. Stuhr, John (2002). Power/inquiry: the logic of pragmatism' in F. Thomas Burke, D. Micah Hester, and Robert B Talisse ; foreword by Larry Hickman

- (ed.) *Dewey's Logical Theory: New Studies and Interpretations*, Vanderbilt University Press
- [28]. Stuhr, John J. (1997). *Genealogical Pragmatism: Philosophy, Experience, and Community*. Albany: State University of New York Press.
- [29]. Tool, M.R., 1953. The philosophy of neo-institutionalism: Veblen, Dewey, and Ayres.
- [30]. Wilson, Lucas B. (1996). "John Dewey's pragmatism and its methods, modernism and postmodernism in economics", PhD. Thesis, Department of Economics, University of Massachusetts Amherst
- [31]. White, M.D., 2003. Reconciling homo economicus and John Dewey's ethics. *Journal of Economic Methodology*, 10(2), pp.223-243.

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این مطالعه دو رویکرد متفاوت در بررسی مسائل مربوط به علوم اجتماعی را از یکدیگر تفکیک می‌کند. مورد اول، رویکرد علی به مسائل است که پس‌نگر، ایستا و فیزیکی یا غیر ارزشی است. مورد دوم، نگرش عملکردی است که پیش‌نگر، پویا و ارزشی می‌باشد. موضوع علم اقتصاد، عمدتاً در ارتباط با واقعیات نهادی است و زیربنای تمام واقعیات نهادی-اجتماعی از ساختار منطقی مشترکی بصورت عملکرد وضعی برخوردار می‌باشند. محور تحقیق در علوم اجتماعی، بایستی با استفاده از هوشمندی، کارآمد سازی عملکردهایی باشد که تعریف می‌شوند، تا اینکه آنها به عنوان پدیده‌های طبیعی، ذاتی و پیش‌ساخته در نظر گرفته شده تا با استفاده از ابزار عقلایی، واقعیات اجتماعی در خلا درک شوند. هدف تحقیق حاضر آن است که نشان دهد منطق جان دیویی می‌تواند زمینه استفاده از رویکرد عملکردی و جامع را فراهم سازد.

واژگان کلیدی: جان دیویی، تحلیل عملکردی، توضیحات علی، هوشمندی، روش شناسی

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