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COMMENTARY

Artifact Mediation in Dewey and in Cultural–Historical Activity Theory

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INTRODUCTION

Garrison (this issue) raised a most interesting issue in his article, the relationship between two theories of activity: cultural–historical activity theory and John Dewey’s theory of activity. Historically, two theoretical schools have developed parallel ideas about the methodological significance of the concept of activity independently and almost simultaneously. According to Rucker (1969), the central concept in the Chicago philosophy is that of activity: “The Chicago pragmatists saw both science and values arising from human action, and they proceeded to derive an entire philosophy from the analysis of action” (p. IV). Without a doubt, John Dewey presented, in his extensive scientific work, the most elaborate version of the pragmatist conception of activity.

Garrison (this issue) made interesting methodological points about the common features and differences of the two theories. As a philosopher and Dewey scholar, he presented a well-informed interpretation of Dewey’s theory. The comments on cultural–historical activity theory were based on a more narrow reading. They were condensed in a one-page characterization of some commonalities between pragmatism and activity theory, based on the introduction to the volume Perspectives on Activity Theory (Engeström & Miettinen, 1999) and on one text each from Leont’ev (1981), Vygotsky (1978), and Zinchenko (1985). Garrison did not refer to philosophical work connected to activity theory (e.g., Ilyenkov, 1977; Lektorsky, 1980). The author made, on the basis of a few statements by Vygotsky and Leont’ev presented in the context of psychological discourse, far-reaching philosophical conclusions. According to them, activity theory remains a captive of dualism and presentative realism.

I cannot help but disagree. Activity theory is just as committed to anti-Cartesian monism as is Dewey’s conception. Moreover, I believe that activity theory can supply useful conceptual tools for transcending the dualism of the internal and the external and for an articulation of what Dewey
and Bentley (1949/1991) characterized as transactional activity, the intricate co-evolution of the subject and her environment.

The methodological closeness of activity theory and Deweyan pragmatism is no news. Several authors have indicated “the extraordinary proximity between Marx’s philosophy of praxis and the fundamental principle of pragmatism” (Joas, 1991, p. 60). In an inspiring article, Garrison (1995) himself analyzed how Dewey “naturalized” Hegel’s conception of labor and tool in formulating his philosophical theory. Like Dewey, Marx saw Hegel’s “most outstanding achievement” in the fact that he “grasps the essence of labor … and comprehends … the real man as the outcome of man’s own labor” (Marx, 1990, p. 177). Marx took this idea as the basis of his anthropology. His concept of labor also played a key role in the emergence of Vygotsky’s conception of mediated action (Davydov & Radzikhovskii, 1985) and was a central theoretical starting point for Leont’ev (1978). It is not surprising, therefore, that several authors have suggested similarities or complementarities between different aspects Dewey’s theorizing and activity theory (Koschman, Kuutti, & Hickman, 1998; Tolman & Piekkola, 1989). Ideas of Vygotsky, Leont’ev, and Dewey have been used as complementary intellectual resources in the development of sociohistorical or cultural–historical theories of learning (Cole, 1996; Rogoff, 1993; Valsiner, 1998).

Garrison’s (this issue) discussion of the differences between interactionism and transactionism opens an interesting possibility for a dialogue between pragmatism and cultural–historical conceptions of activity. As I discuss this distinction, I bring in some additional material pertaining to activity theory. I also try to take the dialogue between the pragmatist and activity-theoretical conceptions of activity a step forward by suggesting some important common themes and challenges for the study of activity.

**VYGOTSKY’S DUALISM?**

Garrison (this issue) started his critique by presenting a citation from Vygotsky (1978): “‘An operation that initially represents an external activity is reconstructed and begins to occur internally’” (pp. 55–57). This Garrison regarded as a postulation of dualism between the outer and the inner and as an instance of presentative realism. He extended the idea of dualism to Leont’ev’s and Zinchenko’s “theories of inter-action” and regarded it as a central weakness of activity theory.

At the end of his article, Garrison (this issue) presented John Dewey’s non-dualist alternative: the transactional concept of activity. In Dewey’s theory of mentality and semiotics, mediating tools have a central role, and “psychic” activity is described in terms of a “transactional three-term functional coordination” involving an agent, a sign, and a signified event. Garrison stated that Leont’ev, Vygotsky, and Zinchenko “all assume a two-term relation of ‘reflection’ in which a dualism of inner and the outer that activity merely mediates.” This conclusion seems paradoxical because the basic proposition of cultural–historical activity theory is a tripartite structure of human acts in which the relationship between an organism and environment is mediated by cultural artifacts, signs, and tools. In addition, Vygotsky (1927/1997b) developed this solution to meet the crisis of psychology dominated by two opposing and equally unsatisfactory solutions: mind interpreted either as an independent internal reality or as psychological processes reduced to reflex actions.

Vygotsky (1978) maintained that the emergence of tool production and use of signs in activity revolutionized the nature of higher mental functions. These processes are now mediated by exter-
nal artifacts (signs) and cannot any longer be interpreted as purely internal because signs permit humans

by the aid of extrinsic stimuli, to control their behavior from the outside. The use of signs leads humans
to a specific structure of behavior that breaks away from biological development and creates new forms
of a culturally-based psychological process. (Vygotsky, 1978, p. 40)

In this context, we can use the term higher psychological function, or higher behavior, as referring
to the combined use of tool and sign in psychological activity.

Tools as human creations include norms of cognition and imply ways of action. In Dewey’s
terms, the locus of control of functions is not within the individual but changes constantly. As
Dewey proposed in his problem-solving model of thought and action, the locus of control—in the
form of reflection—moves to the subject (or agent) mostly when the routine flow of action is bro-
ken and change in the direction of the action is needed.

When Vygotsky spoke about the internalization of the intrapsychological processes, he did not
refer to any epistemological presentative realism, that is, to the internalization of some inert struc-
ture of the outer reality into the mind of the individual. Vygotsky (1989) stated that “to speak of
external process means to speak of the social” (p. 66). He referred to the internalization of human
ways of using tools, of actions shared by an adult and a child and the word meanings related to
these actions. Lektorsky (1980) expressed the same in philosophical terms as follows: “Con-
sciousness is by no means something ready made and given a priori: it is formed and develops in
the process of internalization of external practical activity mediated by objects created by man and
embracing mankind’s socio-historical experiences” (p. 149).

Vygotsky’s (1987) seminal studies of internalization of meanings can be interpreted as the
construction of the “inner.” But the “inner” is formed only as part of shared human activity, which
also involves the reverse process, the externalization of activity into artifacts. In this context, the
“inner” constitutes a special mechanism necessary for the reflective control of activity.1

SUBJECTS AND OBJECTS AS PRODUCTS OF ACTIVITY

Garrison (this issue) started his critique of dualism by stating—citing Dewey—that behind the
Cartesian dualism of subject and object, psychic and material, there is a deeper dualism, that of the
dualism of inner and outer. Although this reformulation makes it possible to discuss directly the
language used by Vygotsky and Leont’ev in their the psychological texts, I can’t see any signifi-
cant difference between these formulations of dualism. In most of his philosophical work, such as
Experience and Nature (1925/1988), Dewey dealt with the Cartesian dualism between the subject
and the object, between mind and the matter. Philosophical works on the foundations of activity
theory discuss as well the dialectics between the subject and the object (Ilyenkov, 1977; Lektorsky,
1980; for a contemporary Western interpretation, see also Bakhurst, 1991). Therefore, I speak in
this article mostly of subject–object dualism.

1About the shift from the paradigm of internalization to the paradigm of externalization or artifact creation, see
The dialectical materialist tradition is not dualist in any Cartesian sense; that is, it does not postulate two distinctive and opposing realms of reality. To substantiate this, I briefly characterize the idea of activity or praxis in Marx’s work. He formulated the category of praxis (transformation of nature, artifact creation) to explain the simultaneous emergence and transformation of the subject and the object (Marx, 1964; Marx & Engels, 1968). The human being (humankind) creates him- or herself by changing nature and by producing the world of cultural objects. This leads to a particular conception of the nature of the environment, something that activity theory shares with Dewey. We are interacting with two kinds of material things: the means and objects of activity. That is why practical activity has a tripartite structure, envisioned by Vygotsky (1978), and, as Garrison (this issue) told us, also by Dewey, in a three-term structure of functional coordination.

As Schmidt (1971) noted, Marx conceived that the unity of the subjective and objective is realized in changing configurations. He analyzed this philosophical problem in historical-economic terms (Schmidt, 1971, pp. 121–122). Under pre-industrial conditions, the natural moment is dominant. Nature (fruitful soils, waters teeming with fish) is primarily a means of subsistence, existing naturally and independently of man. In industrial society, the moment of subjective intervention asserts itself in increasing measure over the material provided by nature. Nature ceases to be a natural entity, independent of man. Labor appears to be ever more clearly a factor of nature. Marx expressed, according to Schmidt, the epistemological significance of this historical development in the first thesis on Feuerbach.

Marx could not accept Feuerbach’s materialist conception of nature as a homogeneous material substratum. His solution was to dissolve this homogeneity into a dialectics of the subject and the object (Marx & Engels, 1968). In the Theses on Feuerbach, Marx called attention to the ideal, the subjective aspect of reality, namely human, creative, transformative practice. Nature is something already transformed by humans and hence understandable only through human mediation. Pre-human nature is no longer accessible. Natural history is indivisible from human history, which is characterized by transformation of nature by human work, the creation of objects by humans. Marx regarded it necessary to retain the non-identity of subject and object within their unity.

Garrison (this issue) stated that the inter-actionist theories of Vygotsky and Leont’ev first postulate two opposing entities, subject (agency) and environment (things, nature), and “then struggle with the problem of putting them back together via activity.” This is not the case. Following Marx, activity theory starts from the unity of nature. In studying the emergence of the human consciousness, it also studies the historical emergence of the subject-object distinction, based on practice that transforms nature and produces cultural artifacts. This activity is the basis of monism: both the subject and the object owe their possibility to activity through which their inescapable unity is constantly reproduced.

THE IMPOSSIBILITY OF ULTIMATE DISTINCTIONS: SUBJECTIVE OBJECTS AND INDUSTRY AS AN OPEN BOOK OF HUMAN PSYCHOLOGY

In Marx’s analysis, the nature, in spite of being socially mediated, remains at the same time a natural world, historically anterior to human history. This material nature cannot be known as such; it is objectively present to man as “the material, object and the instrument of his life activity” (Marx, 1964, p. 112). Concrete, use-value producing work presupposes a natural substratum irreducible to social determinations. All social relations are mediated and produced through natural things, and
vice versa. Nature cannot be reduced to the historical modes of its appropriation in practice. This is true even if humans confront the raw materials of their work in the form of products, entities already transformed by other humans: “Human productive forces stamp the material both intellectually and practically. This process, however, completely confirms nature’s independence of consciousness rather than destroys it” (Schmidt, 1971, pp. 66–67).

Things constitute a contradictory unity of human construction (objectified subjectivity) and pre-human natural quality. The objectivity of activity is manifested in unexpectedness and resistance of things. Resistance has been a central concept in recent pragmatist history and sociology of knowledge (Pickering, 1995). As Lenoir (1992) put it:

Crucial to the pragmatist project is the notion that the nature is not the simple projection of ideas: nor is nature determined by society. Nature is plastic but not infinitely malleable. It resists, and in doing so actively participates in forming our purposes. (p. 162)

Leont’ev (1981) also defined the object of activity in terms of resistance:

Object is usually used in double sense. In the broadest sense as “a thing having existence,” and in narrower sense as something withstanding (German Gegenstand), resistant (Latin Objectum). That to which an act is directed, i.e., as something to which a living creature relates itself as the object of its activity. We shall employ the term object precisely in this narrower, special sense. (p. 36)

The idea of an objective, transformed, and constantly reconstructed world is acknowledged by both activity theory and pragmatism. This also means that the materials and processes of the world brought to the sphere of human activities have a subjective, human dimension. Correspondingly through the use of cultural artifacts and through participation in collective activities, subjects assume the qualities of the environment.

Activity theory, Dewey, and actor-network theory all agree that artifacts carry intentions and norms of cognition and form a part of the agency of the activity, expressing their agency also as resistance.

A tool is also a mode of language. For it says something to those who understand it, about the operations of use and their consequences. … In the present cultural setting, these objects are so intimately bound up with intentions, occupations and purposes that they have an eloquent voice. (Dewey, 1938/1991, p. 52)

The instrumental man-made objects function as objective forms of expression of cognitive norms, standards and object-hypotheses existing outside the individual. (Lektorsky, 1980, p. 137)

Here, both Dewey and Lektorsky characterized cultural artifacts as deeply subjective objects. We share with these rule- and purpose-laden things the ‘locus of control’ of the activity. Latour (1991) expressed the same idea by saying that agency is distributed; it must be attributed to collectives of humans and things.

\(^{2}\)Bruno Latour (1988) used the concept of resistance to characterize reality: “There are only trials of strength and weakness. Whatever resist trial is real (…) . The real is not one thing among others but rather a gradient of resistance” (pp.158–159). For Latour, resistance means durability strength and longevity of different associations of materials or elements (Callon & Latour, 1981, p. 284), not something expressible in terms of human consciousness, knowledge, or goals.
Ways of doing and properties of things are objectified in tools and cultural artifacts. Often when used (because of disturbances and problems), these capabilities must be transformed. The world of culture created by humanity constitutes an external, objective medium of and basis for the mental activity of an individual. The consciousness and will of an individual is an aspect or mental manifestation—Dewey would say ‘function’—of activity, that is, historically evolving relationship between the human being and nature. As Ilyenkov (1979) put it, the ideal (human culture) exists only through the unceasing process of the transformation of the form of activity—into the form of thing and back—the form of thing into the form of activity (of social man of course) … ideality as such exist only in the constant succession and replacement of these two forms of its ‘external embodiment’ and does not coincide with either of them taken separately. (p. 98)

Marx (1964) expressed the idea of distributed will and consciousness almost poetically in his statement of the possibility of human psychology in *The Economic and Philosophical Manuscripts of 1844*:

> We see how the history of *industry* and the established *objective* existence of industry are the *open book* of man’s *essential powers*, the exposure to the senses of human psychology. (…) A psychology for which this, a part of history most contemporary and accessible to sense, remains a closed book, cannot become a genuine, comprehensive and *real* science. (p. 142)

In activity, a thing functions either as a means or as an object. This was, in a fine way, analyzed by Dewey in *Experience and Nature*. Dewey (1925/1988) said that the primary relationship of a tool “is toward another external thing, as the hammer to the nail, and the plow to the soil,” and added, “Only through this objective bond does it sustain a relation to man himself and his activities” (p. 101).

Lektorsky (1977) pointed out that in actual practice the cognition of an object “in itself” and goal-setting, the setting of the task of changing the object, are directly united (p. 101). Dewey made a similar point. The world is known only in purposeful transformation of objects. In making this point in his *Reconstruction of Philosophy*, Dewey (1957) used the example of a carpenter who notices things not as things in themselves, but “in reference to what he wants to do to them and with them” (pp. 114–115). It is only by these processes of active manipulation of things in order to realize his purpose that the carpenter discovers what the properties of the things are. “It signifies nothing less than that the world or any part of it as it presents itself at a given time is accepted or acquiesced in only as material for change” (Dewey, 1957, p. 114).

It is objectification (artifact construction or creation) that permitted Leont’ev to speak of ‘objective activity.’ It is in practical, transformative activity that the resistance of entities becomes visible and makes the conscious reflection of the activity necessary for the subject.

**DIS)CONTINUITY AND DEVELOPMENT OF HIGHER PSYCHOLOGICAL PROCESSES**

Garrison (this issue) stated that a possibility of dualism looms large in many of Leont’ev’s formulations, especially concerning the relationship between internal and external activity. Leont’ev (1977) theorized about activity at two levels, philosophical and psychological. He used the concept
Activity is a non-additive unit of corporeal, material life of the material subject. In a narrower sense, i.e., on a psychological plane, it is a unit of life, mediated by mental reflection, by an image. (p. 182)

The concept of “mental reflection” cannot be interpreted in realistic, non-constructivist terms. Mental reflection is to be understood as “reflection of the conditions of activity,” as part of transformation of reality or problem solving. Dewey used this concept in the latter sense in his theory of reflective thought and action (Miettinen, 2000). So did Leont’ev (1978) when he spoke about “psychic reflection” that serves the orientation of the subject, corporeal creature in activity.

Leont’ev’s (1981) main work, *Problems of the Development of the Mind*, focused on the development of specifically human consciousness. At the end of his article, Garrison (this issue) presented Dewey’s theory of the cultural emergence of meaning, mind, and self. Dewey (1938/1991) presented an account of the emergence of human consciousness in the third chapter of *Logic: The Theory of Inquiry*. This account appears to me as astonishingly parallel to what Leont’ev, Luria, Vygotsky, and other activity theorists developed in their work on the crucial importance of artifact mediation. Though Dewey underlined the continuity between the biological and cultural, he also recognized the qualitative difference of the distinctively human intelligent behavior achieved with the intentional use of artifacts:

Any theory … must face the problem of extraordinary differences that mark off the activities and achievement of human beings from those of other biological forms. (p. 49)

Transformation from organic behavior into intellectual behavior, marked with logical properties, is a product of the fact that individuals live in a cultural environment. Such living compels them to assume in their behavior the standpoint of customs, beliefs, institutions and meanings and projects which are at least relatively general and objective. (p. 51)

Dewey (1938/1991) emphasized the significance of the cultural environment and, specifically, of language, which is the means of communication and coordination of actions in “a community of action” or in “a conjoint undertaking” (p. 52).

Language compels one individual to take the standpoint of other individuals and to see and inquire from a standpoint that is not strictly personal but is common to them as participants or “parties” in the conjoint activities. (p. 52)

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3Dewey also briefly presented this account in his article “Importance, Significance, and Meaning” (1950/1991, pp. 326–327), which was an interesting commentary and a point of comparison to *Knowing and the Known* (Dewey & Bentley, 1949/1991).
Leont’ev’s (1981) main work on the genesis of the specifically human also underlined the continuation between biological and cultural forms of behavior. It explained the transition by the emergence of culture and the use of tools and language in collective human activities. Because of division of labor, the goals of actions performed by different individuals are different and have different relationships to the motive of the collective activity—or to use Dewey’s terms, to the purpose or ‘end-in-view’ of the conjoint activity. The relationship between the individual and collective became the prime concern of Leont’ev’s theorizing of the structure of the activity and led to a radical reformulation of the problem of motives of activity.

**MOTIVE AND ACTIVITY**

Garrison (this issue) discussed at length the conception of motive forces in activity theory and in Dewey. He presented, in an interesting way, Dewey’s “non-teleological interpretation of intentionality.” He then stated that Marx and Vygotsky have “an excessively teleological view of intentionality.” This claim is based on Vygotsky’s reference to Marx’s (1990) well-known statement of the difference between a bee and a spider and a human architect (Vygotsky, 1925/1997a, p. 68). Where bees construct their nest by instinct, human architects have an image of the house in their heads before starting the actual building. This, however, does not imply “flirting with intellectualism,” as Garrison proposed. Immediately after the bee comparison, Marx (1990, p. 284) defined the elements of human labor. In addition to (a) purposeful activity (intention mentioned earlier), Marx named (b) the object on which work is performed, and (c) the instruments of that work. Correspondingly, for activity theory, anticipatory planning (intentionality of the subject) is an important but not the essential feature of activity. The essential feature is mediation by artifacts—signs and tools. When human architects construct a plan for a building, they use a myriad of technical devices, models, and methods in the work, and follow the legal and aesthetic norms of society.

The principle of artifact-mediation implies that the “end-in-view,” or motive, can be constructed only by using cultural means and in no other way. This means that the object and the motive cannot be independent of the array of means at the subject’s disposal. Discussions of the object in activity-theoretical literature are definitely based on a “non-teleological interpretation of intentionality” in which the object and motive of activity are under continuous construction, a horizon of possibilities that changes during the activity (e.g., Engeström, 1990; Miettinen, 1998).

In drawing a line of difference between activity theory and Dewey’s conception of motives, Garrison (this issue) maintained that the problem must be studied starting from “a holistic transactional unity” or “functional coordination.” This claim makes it necessary to ask: What is functional coordination and what is the unit of analyzing “holistic functional coordination”? This brings us to the relationship between the individual and collective. Leont’ev’s (1977) main point was that motives are best understood at the level of a collective, culturally and socially mediated system of activity. Because Leont’ev used the metaphor of production with its division of labor, it was natural to connect the motive (“end-in view”) to a vision of a product, a use-value, something

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*What distinguishes the worst architect from the best of bees is that the architect builds the cell in his mind before he constructs it in wax. At the end of every labour process, a result emerges which had already been conceived by the worker at the beginning, hence already existed ideally* (Marx, 1990, p. 284).
that is needed in people’s life in society. This removes the problem of motive from the confines of a biological organism to the plane of historically organized collective activities, such as production of cars, education of children, or biochemical research work. In such activity systems, members of the community must, at least occasionally, reflect on the “ends-in-view,” on the directive perspective for their collective activity. How this takes place or is achieved is a challenge for the study of human activities.

Dewey’s ideas of reflective thought and action may be used to further elucidate the problem of motive. When a habit, an established way of doing things, does not work, reflective thought and practical experimentation based on a working hypothesis are called for (Dewey, 1933/1989). When this is combined with Dewey’s notion of ‘conjoint activity’ as context of intelligent action and with the idea of three-term functional coordination, a very interesting view of motives emerges. Continuous dilemmas and contradictions of activity are reflected on and solved by transforming the materials and instrumentalities involved (Dewey, 1938/1991, p. 23). What in biological terms may be characterized as ‘a disturbance of a balance’ can now be understood as a disturbance of production or any other activity.

There always exists a discrepancy between means that are employed and consequences that ensue. Sometimes this discrepancy is so serious that its result is what we call mistake and error. The discrepancy exists because of the means used, the organs and habit of biological behavior must be present and actual, while consequences to be attained are future. Present actual means are the result of past conditions and past activities. (Dewey, 1938/1991, pp. 45–46)

Indeed, in industrial organizations, disturbances are increasingly seen as an important source for change and development (e.g., Perrow, 1984). Dewey (1938/1991) referred to the discrepancy between means and consequences as a fundamental source of change. Activity theory would refer to contradictions between means and the object in construction. Aspects of this connection between Dewey and activity theory were recently analyzed by Koschman, Kuutti, and Hickman (1998).

TRANSACTIONAL PHILOSOPHY AND EMPIRICAL RESEARCH ON ACTIVITY

The transactional philosophy of Dewey and Bentley is a radical process philosophy. Transaction is the level of inquiry “where systems and naming are employed to deal with aspects and phases of action, without final attribution to elements or any other detachable or independent ‘entities,’ ‘essences,’ or ‘realities’ and without isolation of presumptive detachable ‘relations’ from such detachable ‘elements’” (Dewey & Bentley, 1949/1991, pp. 101–102).

I cannot see a contradiction between the concept of transaction and the activity-theoretical idea of subject-object dialectics mediated by artifacts in human activity. In the latter, a human subject, an object, rules, tools, and community co-evolve interactively and are constantly changed by their very interaction. The challenge is how this kind of co-evolution or transaction can be empirically analyzed in a sensible way.

Transactional philosophy resembles the methodological agenda of actor-network theory, which does not want to make distinctions between different kinds of entities, such as humans and non-humans (the principle of generalized symmetry). Actor-network theory would rather focus
on the process of production of nature-society, in which actants evolve through enlisting and translating one another and are changed before they become frozen into stable entities. In empirical studies of innovations, actor network theory confronted problems that turned against its methodological ideals (Miettinen, 1999). The principle of not having a hypothesis of the important actors or entities beforehand turned out to be difficult to realize in empirical research.

The methodological experiences of actor-network theory raise the question of how transactional philosophy might be used in the concrete study of human activity. This problem becomes manifest in the thesis repeated several times by Garrison (this issue): For methodological reasons it is necessary to break the flow of transactions into an analysis of interaction between entities. Transaction analysis, therefore, functions like a reminder of the ultimate “event-nature” of reality and human conduct. Dialectics makes this methodological step visible and explicit in breaking the unity of nature into the dialectics of subject and object, understood as a historically evolving relationship of a nature-transforming conscious creature to its environment. To make the analysis possible, activity theory models the structure of human activity in the form of a culturally and socially mediated activity system (Engeström, 1987; Cole & Engeström, 1993). It is a hypothesis about important relations and interactions in the study of the co-evolution of humans and things. It is a conceptual model for studying “conjoint activity” (Dewey, 1938/1991), or the “collective” (Latour, 1994) where the transactions take place.

DEWEY, PRACTICAL ACTIVITY, AND CONCERN FOR THE HUMAN CONDITION

Garrison (this issue) took up the most well-known contribution of Dewey and Bentley’s (1949/1991) Knowing and the Known, namely the conception of self-action, interaction, and trans-action as three successive and progressive scientific modes of viewing the world. In his introduction to the work published in the collected works of Dewey, Lavine (1991) was doubtful on how well this work represents Dewey’s thought and conception of action. Lavine concluded that “the scientific transactionalism of Knowing and the Known leaves the philosophic construction of Dewey hopelessly undermined” (p. XXXVii).

One of the key themes shared by Dewey and activity theory not much dealt with in the Dewey and Bentley (1949/1991) work is the idea of social inquiry as means of reconstruction of the society in solving vital social problems. In Democracy and Education, Dewey (1916/1985) formulated his perspective as follows:

From the standpoint of the idea of working hypothesis, the chief function of philosophy is not to find out what difference ready-made formulae make, if true, but to arrive at and to clarify their meanings as programs of behavior for modifying the existent world. From this standpoint, the meaning as a world-formula is practical and moral, not merely in the consequences that flow from accepting certain conceptual content as true, but as regards that content itself. (pp. 312–313)

This orientation to practical transformation of the world is a key feature of Dewey’s theory of inquiry and activity, and it is this feature perhaps more than any other that brings Dewey’s theory close to both Marx and activity theory. I see this practical orientation as a potential point of departure for further dialogue between pragmatism and cultural–historical theory of activity.
REFERENCES


