The Basic Vocabulary of Activity Theory[1]

Charles W. Tolman

The articles by Schurig and Enerstvedt in this issue of *Activity Theory* demonstrate some of the problems that arise from the theory's vocabulary. These appear to stem mainly from the fact that the English equivalents are almost always everyday words that are ordinarily understood differently than intended by the Russian or German originals. Indeed there is a real danger that the full scientific potential of Activity Theory will not be realised among English-speaking users if insufficient attention is given to the peculiar meanings of its fundamental terms.

As a modest, but useful, step toward terminological clarification, quotations of a definitive character bearing on each of several basic terms in the vocabulary of Activity Theory have been collected and are presented below. These should of course not be taken as a substitute for a careful study of pertinent English-language works. Indispensible here, for example, is the book by Wertsch (1979), in particular the article it contains by A.N. Leontyev. Pertinent articles in the translation journal Soviet Psychology also belong on the list of "required reading".

Most of the quotations come from A.N. Leontyev's *Problems of the Development of the Mind* (1981). This work was chosen because it is widely recognized as a basic text in Activity Theory and because, although it has been published in English, it is not readily available. A small number of copies was printed in Moscow by Progress Publishers in 1981 and it has, to my knowledge, not been reprinted.

The remaining quotations come from the *Dictionary of Philosophy*, edited by I. Frolov and published by Progress Publishers in 1984. These represent the "context" of Activity Theory, namely dialectical materialism, which is the philosophical foundation of the theory and the source of much of its basic vocabulary, including the term "activity." Indeed Activity Theory must be understood as a further development of dialectical and historical materialism as a psychological and social theory. An adequate understanding of Activity Theory requires an adequate understanding of dialectical materialism. A book like *The Fundamentals of Marxist-Leninist Philosophy*, edited by F.V. Konstantinov and others (Moscow: Progress Publishers, 1982), therefore, also belongs on the "indispensible" reading list.

A note on "sexist" language: The texts quoted below use the generic "man" in a way that has become regarded as objectionable by many in English-speaking countries. The word has not been edited out; the reader is urged to keep in mind that it comes from the russian word "chelovek" (German: "Mensch") which is unequivocally generic and utterly neutral with respect to sexgender.

Action (German: Handlung; Russian: deistvie)

"There is no activity in animals that does not respond to some sort of direct biological need, that is not evoked by an effect with biological meaning for them, i.e. the sense of an object that satisfies a given need of theirs, and that would not be directly aimed in its final link at that object. The object of animals' activity [...] and its biological motive always merge in them, and always coincide with one another.

Let us now examine the fundamental structure of the individual 's activity in the conditions of a collective labour process from this standpoint. When a member of a group performs his labour activity he also does it to satisfy one of his needs. A beater, for example, taking part in a primeval collective hunt, was stimulated by a need for food or, perhaps, a need for clothing, which the skin of the dead animal would meet for him. At what, however, was his activity itself directly aimed? It

[1] [In: Multidisciplinary Newsletter for Activity Theory. 1st vol 1988, no 1-2, p. 14-20]

may have been directed, for example, at frightening a herd of animals and sending them toward other hunters, hiding in ambush. That properly speaking, is what should be the result of the activity of this man. And the activity of this individual member of the hunt ends with that. The rest is completed by the other members. This result, i.e. the frightening of game, etc. understandably does not in itself, and may not, lead to satisfaction of the beater's need for food, or the skin of the anima!. What the processes of his activity were directed to did not, consequently, coincide with the motive of his activity; the two were divided from one another in this instance. Processes, the object and motive of which do not coincide with one another, we shall call 'actions'. We can say, for example, that the beater's activity is the hunt, and the frightening of game his action." (Leontyev, 1988: 209-210)

Activity (German: Tätigkeit; Russian: deyatel'nost')

"Activity is a concept connoting the function of the individual in his interaction with the surroundings. Psychic activity is a specific relation of a living body to its environment; it mediates, regulates, and controls relations. between the organism and the environment. Psychic activity is impelled by need, aimed at the object which can satisfy this need, and effected by the system of actions. It presumes that the body has psyche, but at the same time constitutes the basic cause of its development. The elementary form of psychic activity should be distinguished from its highest form. The former is typical of animals and consists, in the instinctive adaptation of the body to its environment. The latter, which stems from the former and transforms it, is exclusively an attribute of man. The specifically distinctive feature of the highest form of activity is man's deliberate effort to transform his environment. The activity of man has a social complexion and is determined by the social conditions of life. Psychic activity of man may be external or internal. The former consists of specifically human operations with existing objects effected by the movement of arms, hands, fingers, and legs. The latter proceeds in the mind, by means of 'mental actions', wherein man operates not with existing objects and not through physical movements, but with their dynamic images. Internal activity plans external activity and realises itself through it. Division of labour causes a differentiation between theoretical and practical forms of activity of man. According to the range of man's and society's needs, there also arises the range of concrete types of activity, each of which usually embraces elements of external and internal, practical and theoretical activity." (Frolov, 1984: 8)

Aim (Goal) (German: Ziel; Russian: tsel)

The object of an action, variously translated as goal or aim. It is to be distinguished from motive and condition. See entries for action and operation. (C.T.)

Appropriation (German: Aneignung; Russian: prisvoyenie)

"From its very birth a child is surrounded by the objective world created by people, namely everyday objects, clothes, very simple instruments, and language and the notions, concepts, and ideals reflected in language. A child even encounters natural phenomena in conditions created by men; clothing protects it from exposure and artificial light dispels the gloom of night. The child, it can be said, begins its psychic development in a human world.
Does the child's development, however, proceed as a process of its adaptation to this world? It does not; in spite of the widely held opinion to the contrary, the concept of adaptation by no means expresses the essential in 'child's psychic development. The child does not adapt itself to the world of human objects and phenomena around it, but makes it its own, i.e., appropriates it.
The difference between adaptation in the sense that the term is used in regard to animals, and appropriation, is as follows: biological adaptation is change of the subject's species properties and capacities and of its congenital behaviour caused by the requirements of the environment. Ap-

propriation is another matter. It is a process that has as its endresult the individual 's reproduction of historically formed human properties, capacities, and modes of behaviour. In other words it is a process through which what is achieved in animals by the action of heredity, namely the transmission of advances in the species' development to the individual, takes place in the child.
Let us take a very simple example. In the world around it the child comes up against the existence of language, which is an objective product of the activity of preceding human generations. In the course of its development the child makes this its language. And this means that such specifically human capacities and functions are molded in it as the capacity to understand speech and to talk, and the functions of hearing speech and articulation." (Leontyev, 1981: 422-423)

Conditions (German: Bedingungen; Russian: uslovia)

The object of an operation. To be distinguished from motive and goal or aim. See entries on operation, activity and action. (C.T.)

Consciousness (German: Bewußtsein; Russian: soznanie)

"The highest form of reflection of objective reality inherent only in man. Consciousness is the sum total of mental processes which actively participate in man's understanding of the objective world and of his personal being. It takes its origin in labour, socio-productive activity of people, and is inseparably linked with language, which is as old as consciousness. Man is born into the world of objects created by previous generations, and is formed as such only in the process of learning how to use them to a definite end. The mode of his relation to reality is not determined directly by his bodily organisation (as in the case with animals), but by the habits of practical activity acquired solely through communication with other people. In communication, man's own vital activity is perceived by him also as the activity of others. Therefore, he assesses every action of his by the social standards he holds common with other people. It is precisely because man treats objects with understanding and knowledge, that the mode of his attitude to the world is called conscious. Without understanding, without knowledge, which is a result of man' s socio-historical activity and human speech, there is no consciousness either. Any sensuous image of an object, any sensation or notion, is part of consciousness inasmuch as it possesses definite denotation and sense. Knowledge, denotation and meaning, preserved in language, direct and differentiate man's sentiments, will, attention, and other mental acts, combining them into a single consciousness.
Knowledge accumulated by history, political and legal ideas, morality, religion, social psychology, and the achievements of art constitute the consciousness of society as a whole. But consciousness must not be identified solely with knowledge and thinking in terms of language. There is no thinking outside man' s vital, sensuous and will-governed mental activity. Thinking involves not a mere processing of information; it is an active, sensuous and purposeful transformation of reality in conformity with reality's own essence. Thinking in terms of language - the changing of the meaning of words, signs, symbols, etc. - is only one form of man's thinking. On the other hand, the concepts of consciousness and psyche must not be identified, i.e., one must not consider that every mental process at every given moment is included in consciousness. A number of mental emotions can be for a definite time 'beyond the threshold' of consciousness. Absorbing historical methods of thinking elaborated by preceding history, consciousness masters reality in idea, setting itself new aims and tasks, designing tools for the future, and directing all practical activity of man. Consciousness is shaped by activity and, in its turn, influences this activity, determining and regulating it. As they realise their creative plans, people transform nature and society and thereby transform themselves." (Frolov, 1984: 81-82)

Instinct (German: Instinkt; Russian: instinkt)

"A form of psychic activity, a type of behaviour. In a broad sense, instinct is counterposed to consciousness. Instinctive behaviour is characteristic of animals; it is based on biological forms of existence developed in the process of adaptation to the environment. On the other hand, conscious behaviour is expressed in the purposeful changing of nature by man and is based on his knowledge of nature's laws. In a more specific sense, instinct is a type of behaviour inborn in a given species of animals and fixed by biological heredity [...] With evolutionary development, the role of intricate reflectory activity resting on individual experience becomes more and more important. Instincts are also a feature of man, but in humans they do not play a decisive role, because specifically human activity originates and develops as a consequence of socio-historical processes and is prompted chiefly by social, not biological motives." (Frolov, 1984: 97)

Interiorisation (German: Interiorisierung; Russian: interiorizatsie)

"The interiorisation of actions, i.e. the gradual conversion of external actions into internal, mental ones, is a process that necessarily takes place in man's ontogenetic development. Its necessity is determined by the central content of a child's development being its appropriation of the achievements of mankind's historical development, including those of human thought and human knowledge. These achievements come to him as external phenomena (objects, verbal concepts, knowledge). Their influence evokes a particular response in the child and a reflection of them arises in it; its first reactions to them, however, correspond only to their immediate physical aspect, and not to their specific qualities; their reflection in the child's head is consequently still also a first-signalling one, not yet refracted in meaning, i.e. not yet refracted through the prism of the generalised experience of social practice. For these phenomena to be reflected in their specific quality, i.e. in their meaning, the child must perform activity in relation to them that is adequate to the human activity that is 'objectified' or embodied in them. As regards spiritual phenomena, for instance as regards some concept that the child encounters for the first time, it must perform a corresponding mental, thought activity. How, however, does this form of activity take shape in the first place?
Like the influence of man-made objects themselves, the effect of concepts and knowledge is unable by itself to evoke the appropriate, adequate actions in a child, for it must still master them and that also requires active construction of them by another person; unlike external actions, however, inner ones cannot be directly built from outside. When an external action is being instilled, it can be demonstrated to the child, and finally there can be mechanical intervention in its execution, for example, by holding the child's hand in the required position, by correcting the trajectory of its movement, etc. Inner action, action 'in the head', is another matter. It cannot be demonstrated or be seen; it is impossible to intervene directly in its performance by the child. To build a new mental action in a child, for example (addition), the action therefore needs to be presented beforehand to the child as an external one, i.e. it needs to be exteriorised. It is in this exteriorised form, in the form of a developed external action, that it is initially formed. Only afterwards, as a result of its gradual transformation, and a change of the level at which it is performed, is it interiorised, i.e. transformed into an internal act that takes place now entirely within the child's mind." (Leontyev, 1981: 310-314) [Interiorisation has frequently also been translated as "internalisation" (e.g. Wertsch, 1979).]

Meaning (German: Bedeutung; Russian: znachenie)

"Meaning is the generalization of reality that is crystalised and fixed in its sensuous vehicle, i.e. normally in a word or a word combination. This is the ideal, mental form of the crystallisation of mankind's social experience and social practice. The range of a given society's ideas, science, and language exists as a system of corresponding meanings. Meaning thus belongs primarily to the world of objective, historical phenomena. And that must be our starting point.

Meaning, however, also exists as a fact of the individual consciousness. Man perceives the world and thinks about it as a social, historical entity; he is armed and at the same time limited by the ideas and knowledge of his time and his society. The wealth of his consciousness is in no way reducible to the wealth of his personal experience. Man does not know the world like a Robinson Crusoe making independent discoveries on an uninhabited island. He assimilates the experience of preceding generations of people in the course of his life; that happens precisely in the form of his mastering of meanings and to the extent that he assimilates them. Meaning is thus the form in which the individual man assimilates generalised and reflected human experience." (Leontyev, 1981: 226)

Motive (German: Motiv; Russian: motiv)

The object of an activity. To be distinguished from goal or aim and condition. See entries on activity, action and operation. (C.T.)

Need (German: Bedürfnis; Russian: potrebnost)

"A need of some sort is a prerequisite for any activity. In itself a need cannot, however, determine the concrete direction of activity. A need gets its definiteness only in the object of the activity; it has as it were to find itself in it. In so far as a need finds its definiteness in an object (becomes 'objectified' in it), the object becomes the motive of the activity, and that which stimulates it.
In animals' activity the range of possible motives is strictly limited to actual natural objects corresponding to their biological needs, and any step in the development of the needs themselves is caused by a change in their physical organisation.
It is another matter in the conditions of men's social production of objects serving as means of satisfying their needs. As Marx and Engels said, production furnishes not only the material for a need but also the need for material.
What, however, does it mean psychologically? In itself the fact of the satisfaction of a need by means of new objects - means of consumption - can [only mean] that the objects acquire a corresponding biological sense and perception of them will subsequently stimulate activity directed to getting them. We are concerned [however] with the production of objects that serve as means to satisfy a need. And for that it is necessary for consumption - whatever the form it takes - to lead to reflection of the means of consumption as what must be produced. Psychologically that means that the objects - the means of satisfying needs must be recognised as motives, i. e. must enter consciousness as an inner image, as a need, as stimulation, and as objective." (Leontyev, 1981: 239-240)

Objectification (German: Vergegenständlichung; Russian: objektivirovanie)

"[A] ...characteristic distinction of human activity.
Objectification means the passage of human active forces and capabilities from a form of motion to the form of an object in the process of the subject's activity; [its opposite,] de-objectification means the transition of an object from its own sphere into the sphere and form of human activity. These concepts were applied in Hegel's philosophy. But Hegel idealistically reduced man's labour activity solely to abstract spiritual labour, to thinking, and unhistorically identified objectification with alienation. These concepts have a fundamentally different meaning in the description of labour given in Marx's early works. Examining objectification and de-objectification in their unity, Marx revealed the place of labour in man's life, the fact that by his labour man actively remakes, humanises, the objective world, creating his own special 'human reality', the world of culture (as a result of objectification, which expresses the active side of labour). At the same time man depends on the objective world, including the results of the preceding activity

of mankind, utilising them in his activity and coordinating this activity with objective laws (as a result of de-objectification, which expresses the connection of man with the object of his activity). All this enabled Marx scientifically to characterise the process of labour, to open a way to the dialectical materialist understanding of the relationship between the subject and object and to solve problems of the theory of knowledge in the light of practice." (Frolov, 1984: 298)

Operation (German: Operation; Russian: operatsia)

[Leontyev has just described an experiment in which a catfish had learned to get to food by going around a barrier, but then persisted in the roundabout route after the barrier was removed.]
"When a mammal is separated from food by an obstacle, it will, of course, go around it. That means that, as in the behaviour of the fish described above in. conditions of an obstructed tank, we can distinguish a certain content in its activity relating objectively to the barrier, which represents one of the external conditions in which the given activity takes place, rather than to the food itself toward which it is directed. Between the activity of fish described and that of mammals, however, there is a great difference, which is expressed in this, that while the content of the fish's activity (roundabout movements) was retained after removal of the barrier and disappeared only gradually, higher animals usually make directly for the food in such a case. This means that the influence to which mammals' activity is directed no longer merges with influences from the barrier in them, but both operate separately from one another for them. The direction and end result of the activity depends on the former, while the way it is done, i.e. the mode in which it is performed (e.g. by going around the obstacle) depends on the latter. This special make-up or aspect of activity, which corresponds to the conditions in which the object exciting it is presented, we shall call operation." (Leontyev, 1981: 175-176)

Psyche (German: Psyche; Russian: psikhika).

"The product and condition of signal interaction between a living system and the surrounding world. For man psyche takes the form of phenomena of his subjective world: sensations, perceptions, notions, thoughts, feelings, etc. [...] In psychology the concept of psyche is used to describe the specific signal interaction of a living system (animal, men) with the surrounding world. In the process of such interaction, psychic models are formed in the human brain to reflect the environment, man himself, including the organism's state. While reflecting reality, these models regulate the process of man's interaction with the surrounding world and allow him to find his bearings in it. The appearance of psyche is connected with the development of life, with the complication of the forms of interaction between living beings and their surroundings. In the process of animal evolution the special organ of psyche was formed, first the nervous system and, later, its higher department - the brain. The psyche of man developed in the process of social intercourse, of labour, inseparably linked with the development of speech. It differs qualitatively from the psyche of animals, the product of biological development. A specific feature of human psyche is awareness of reality, which ensures prevision of events and planning of actions. The transition to the higher form of the development of psyche was the result of the reconstruction of the organ of psyche - the brain: in the human phase, the mechanisms of the nervous activity of animals were complemented with the mechanisms of the second signal system (Pavlov). From its very inception human psyche has been a socio-historical product. In individual development the psyche of man is formed in the process of his mastering the forms of activity developed in the course of history." (Frolov, 1984: 342-343) [Frolov actually used the word "psychics". This has been changed here to "psyche" in order to conform to usage in the majority of translated works. It has occasionally been incorrectly translated as "mind" as in the title of Leontyev's book (1981)]

Reflection (German: Widerspiegelung; Russian: otrazhenie)

"A basic concept of the materialist theory of knowledge and its core the theory of reflection. The dialectical materialist theory of reflection distinguishes between reflection in inorganic nature, on the one hand, and in living nature and social life, on the other, where it is active and is exercised by highly organised systems possessing an independent force of reaction, such as biological metabolism at the lowest level and the deliberate creative, anticipative and transformative activity of man at the highest. In inorganic nature reflection is the property of things to reproduce, under the influence of other things, such traces, imprints and reactions whose structure accords with some quality of the things that exercise the influence. But these imprints are not utilised by the things themselves. In living nature they are used for self-preservation and self-adaptation, e.g., the irritability of plants and simple organisms. Psychic reflection develops with the appearance and evolution of the nervous system and brain, through which the higher nervous conditioned reflex and psychic activity is exercised, securing the behavioural orientation and regulation of a subject-organism in the environment. The psychic reflection of men and animals has two sides: 1) content and 2) form, i.e., the mode of existence, expression and transformation of this content. Human knowledge differs in quality from the psychic reflection of animals because it is social by nature." (Frolov, 1984: 353)

Sense (German: Sinn; Russian: smysl)

"Arising in the course of the development of activity, [sense, a relation between the subject and the world that is created by the subject's activity,] is originally biological, and animals' psychic reflection of the external medium is inseparable from this relation. Subsequently, for the first time only in man, this relation is differentiated for the subject as his relation and comprehended. This conscious sense is created concretely psychologically by an objective relation reflected in man's head of what stimulates him to act to what his action is directed as its direct result. In other words conscious sense expresses the relation of motive to goal. It is necessary simply to stress specially that we use 'motive' not to signify the experiencing of a need but as signifying the objective thing in which this need is concretised in the conditions and to which the activity is directed.
Suppose a student reads the literature recommended to him. That is a conscious, purposive process. Its conscious aim is to assimilate the content of this literature. But what personal sense does this aim, and so the corresponding action, have for the student? That depends on what the motive is that stimulates the activity realised by his action. If it consists in preparing him for his future profession, the reading will have one sense for him, but if it is simply, for example, to pass an examination, then the sense of the reading will understandably be quite another one, and he will read the literature with other eyes, and assimilate it in a different way.
The question of personal sense can thus be answered by bringing out the corresponding motive.
Sense is always the sense of something. There are not 'pure' senses. Subjectively sense therefore belongs, as it were, to the comprehended content itself, and seems to be part of its objective content. That circumstance has also created very great misunderstanding in psychology and psycholinguistics, which is expressed either in complete indistinguishableness of these concepts, or in sense being considered a concretised meaning, depending on the context or situation. In fact, although sense ('personal sense') and meaning introspectively seem merged in consciousness, the two concepts need to be differentiated from one another. They are linked internally with one another but only by a relation that is the reverse of the above-mentioned one; or rather sense is expressed in meanings (like motive in aims), but not meaning in sense.
In some cases the disparity between sense and meaning in consciousness comes out especially clearly. One may know some historical event or another very well and excellently understand the significance of some historical date, but that date may at the same time have a different sense for one: one sense, for example, for a youth who has not yet left school, another for the same youth when he is defending his country, and giving his life for it, on the battlefield.
Has his knowledge of the event, of this historical date, been altered or increased? No, it has perhaps even become less distinct, something perhaps even forgotten; for some reason, however,

it is now recalled and brought to mind, and then it proves to be illuminated in his consciousness, as it were, in a fuller content. It has become different, but not as meaning, and not from the angle of knowledge of it, but from the aspect of its sense for the individual; it has acquired a new, deeper sense for him." (Leontyev,1981:229-230)

References

Frolov, I. (Ed.). (1984). Dictionary of philosophy. Moscow.: Progress Publishers.
Konstantinov, F.V. et al. (Eds.). (1982). The fundamentals of Marxist-Leninist philosophy. Moscow: Progress Publishers.
Leontyev, A.N. (1981). The problems of the development of the mind. Moscow: Progress Publishers.
Wertsch, J.V. (Ed.). (1979). The concept of activity in soviet psychology. Armonk, NY: M.E.Sharpe, Inc.