

Activity theory

Theory and practice

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Activity theory has been characterized by Yrjö Engeström as ‘the best kept secret of academia’ (Engeström 1993: 64). In the last decades the number of publications on activity theory has increased rapidly, and various applications of activity theory to different systems (learning, work, information systems, etc.) and disciplines (psychology, linguistics, cognitive science, anthropology, etc.) have taken place (Engeström et al. 2005; Sannino and Nocon 2008). Roth (2004: 1) argues that ‘activity theory no longer is the secret that it was in 1993’. However, if we take into account Nissen’s (2011) statement about the existence of directly opposite readings of the Russian legacy of activity theory, we can conclude that activity theory remains a secret of academia. As Hegel pointed out ‘The familiar or well-known in general, because it is well known [*bekannt*] is not known [*erkannt*]’ (Hegel and Yovel 2005: 125).

The paradox is that although activity theory has emerged as an attempt to overcome the crisis of traditional psychology, nowadays the expansion of activity theory is connected with the acceptance of an uncritical, technical, instrumental view of the concept of activity as a simplifying, functionalist scheme. What can activity theory offer for an understanding of human development from a critical standpoint? Is it possible to reconsider activity theory from the perspective of critical psychology?

Definitions and sources of the concept of activity

In contemporary sociocultural literature, the question of the meaning and character of activity theory arises. Is activity theory an umbrella term with different approaches or a single theory? Holzman (2006) pointed out that there is no unified activity theory, but a wide variety of approaches that have been inspired by Vygotsky. Holzman describes different articulations of activity theory:

a general conceptual system with these basic principles: the hierarchical structure of activity, object-orientedness, internalization/externalization, tool mediation and development; theoretical approaches that place culture and activity at the center of attempts to understand

human nature; . . . a non-dualistic approach to understanding and transforming human life that takes dialectical human activity as its ontology.

(Holzman 2006: 6)

Other thinkers reject the interpretation of activity theory as an 'eclectic grouping of multiple theories' (Sannino et al. 2009: 1). Engeström and other scholars (Engeström 1987; Engeström et al. 1999) argue that in accordance with activity theory, the concept of activity should be considered as the primary unit of analysis, or as 'the basic unit of concrete human life' (Sannino et al. 2009: 1). To answer this and many other open-ended theoretical questions, we first have to examine the origin of the concept of activity and the historical development of its meanings. The introduction of the concept of activity in the field of psychology can be understood only if we take into account the social and scientific context of its formation.

The concept of activity has its philosophical roots in nineteenth century German classical philosophy (especially in Hegel's philosophy) and Karl Marx's works (Blunden 2010). Marx's *Theses on Feuerbach* is worth a special mention. Indeed, Marx, in the *1st Thesis on Feuerbach*, criticized all previous materialism for seeing reality 'only in the form of the object [Objekts], or of contemplation [Anschauung], but not as human sensuous activity, practice [Praxis], not subjectively' (Marx 1975/2005: 3). The introduction and expansion of the concept of activity in psychology was realized in the context of Soviet psychology. First of all, we should take into account the *social context of the development of Soviet psychology* in which the concept of activity developed. The historical period immediately after the October revolution was 'a period of creative turmoil and one of great enthusiasm for the arts and sciences. And there was a lot of experimentation in cultural and political life' (Sannino et al. 2009: 8). The situation of science that emerged after the October revolution was described by Luria:

This atmosphere immediately following the Revolution provided the energy for many ambitious ventures. An entire society was liberated to turn its creative powers to constructing a new kind of life for everyone. The general excitement, which stimulated incredible levels of activity, was not at all conducive, however, to systematic, highly organized scientific inquiry.

(Luria 1979: 3)

The concept of activity acquired new dimensions and meanings as a theoretical and practical project in the context of radical social transformation. Moreover, the concept of activity was one of the key concepts elaborated in the context of Soviet psychology as an attempt to build a 'new psychology'. Neither the introspective psychology of consciousness nor behaviourism could cope with the theoretical and practical issues that arose in the context of transformative social practice. Introspective psychology focused only on the immediate data of consciousness; behaviourism reduced the activity of organisms to the reactions to external stimuli (Rubinstein 1987). Existing psychological theories could not face the social challenges and acute issues that emerged in social practice.

Two sources of the concept of activity in psychology can be distinguished. Sechenov's psychophysiological reflex theory is the first major source of the concept of activity. The term 'activity' acquired the meaning of physiological activity of organisms. In the context of Soviet physiology, several theories on physical activity of organisms have emerged: Pavlov's theory of Higher Nervous Activity, Anokhin's theory of functional systems, Bernstein's physiology of

activity, Ukhomsky's theory of the dominant under the influence of Sechenov's psychophysiological reflex theory (Bedny and Karwowski 2007). In Soviet psychology the concept of activity acquired a different meaning under the influence of German classical philosophy, and especially Marxism, which became the second major source of the concept of activity.

[T]he term 'deyatel'nos't' or 'activity' refers to the human mobilization around conscious goals in a concrete, external world. Inasmuch as only humans can establish conscious goals, only humans can be the subjects of activity. This emphasis on conscious goals in activity theory implies that that human activity develops less from human biology, than from human history and culture.

(Bedny and Karwowski 2004: 136)

The focus on the cultural, social, and historical dimension of human activity is the main contribution of the second source of the concept of 'activity'. Wertsch (1985: 210) notes that 'the Russian term "*deyatel'nos't*" has no adequate English equivalent'. The term 'activity' refers mainly to physical activity, behaviour. The Russian term '*deyatel'nos't*' corresponds to the German term '*tätigkeit*' rather than the term '*aktivität*' (Kaptelinin 2005). The term '*deyatel'nos't*' includes both external and internal aspects of human activity. All of these aspects of activity of concrete individuals have developed in human history and culture. The term '*deyatel'nos't*' came from German classical philosophy and Marxism and was transformed in the context of Soviet psychology and philosophy.

Versions of activity theory

In the 1920s, psychologists in the Soviet Union used the term 'behaviour'. For example, in 1925 Vygotsky wrote his famous work 'Consciousness as a problem of psychology of behaviour'. However, even though the term 'activity' was used, it acquired a different meaning than that term in contemporary activity theory. As Veresov pointed out, the term '*deyatel'nos't*' was used not in the sense of *Tätigkeit* i.e. as 'the practical, socially organized, object-related, goal-directed activity of an individual . . . but in that of *Aktivität*, in line with typical and traditional usage in the physiology and psychology of the time' in Vygotsky's texts between 1924 and 1927. 'Vygotsky used this term in the same sense as Ivan Pavlov (higher neural activity – *vysshaya nervnaya deyatelnost*)' (Veresov 2005: 40–41).

In contrast to the behavioural scheme of relationship 'stimulus–response' (stimulus–reflex), Vygotsky proposed a method for the investigation of an instrumental act. The link between A and B is connected to stimulus–response. A psychological tool is used when people attempt to solve the problem in a different way than of stimulus–response connection. Vygotsky used the concept 'instrumental act' and not the concept 'activity' with the meaning it acquired in the later development of activity theory. In the context of an 'instrumental act' a psychological tool as a middle term appears between subject and object. Vygotsky argued that symbols and signs, as psychological tools, mediate psychological processes in the same way that material tools mediate overt human labour activity. Tools and instruments are used by humans for transformation of the material world. Symbols and signs are used by people for the regulation of their own psychological processes: 'In the instrumental act man masters himself from the outside–via psychological tools' (Vygotsky 1987: 87).

The concept of activity had a crucial character within the research programme of Kharkov school members (i.e. Leontiev, Galperin, Zaporozhets, and others) and it is considered by them

as a means of bringing psychology ‘out of the close world of consciousness’ (Haenen 1993: 77). Unlike Vygotsky, who emphasized the crucial role of speech, Galperin and other Kharkov school members focused on the investigation of the content of human practical activity.

The real relationships between activity theory and cultural-historical psychology were complex and contradictory. In the early 1930s in the Soviet Union, cultural-historical psychology and activity psychology emerged as interconnected but independent research programs. Cultural-historical psychology emerged as the study of the development of higher mental functions (Veresov 2010). Activity psychology emerged as the study of the external, objective activity and its influence on the development of mental activity. According to Leontiev (1981), activity contributes to the orientation of subjects in the world of objects. Activity is not an aggregate of reactions, but a system of processes which deal with the vital relationships of organisms to their environment. Leontiev distinguished two meanings of the term ‘activity’. The term ‘activity’ is used to describe biological and physiological processes. In this meaning, activity is identified with the reactivity of organisms, their ability to respond to stimulus. In psychology the term ‘activity’ refers to the particular relationships of the individuals to their environments. The second meaning of the term ‘activity’ is connected with the reflection of reality by subjects.

Leontiev adopted activity as an object of psychological investigation and attempted to investigate its inner structure. The three-level (or three-component) structure of activity includes: activity, actions, and operations. Activity is governed by its motives. Actions are subordinated to conscious goals. Operations are influenced by the conditions of its accomplishment. Leontiev (1978) introduced the concept of ‘object oriented activity’ (*predmetnaja dejatelnost*). One kind of activity is distinguished from others by its object. The object of an activity is presented as its true motive. Human activity exists in the form of a chain of actions. An action is directed toward a goal. Each action has operational aspects connected with the concrete conditions in which it can be achieved.

Another version of the psychological theory of activity was introduced and developed by Rubinstein. In 1934, Rubinstein’s paper ‘Problems of psychology in the works of Karl Marx’ devoted to the analysis of an early Marx work, the *Economic and Philosophic Manuscripts* (written in 1844), was published. Rubinstein argued that the Marxian notion of human activity is the starting point of the reconstruction of psychology. Human activity is Man’s objectification of himself, ‘the process of revelation of its essential powers’ (Rubinstein 1987: 114). Human beings and their psyches are formed in the processes of human activity. Changing the world, human beings simultaneously change their own essential powers. The *Economic and Philosophic Manuscripts* of 1844 marked the emergence of the method of scientific investigation of Marx. However, it is only the starting point of scientific investigation of the political economy of capitalism. In Marx’s *Das Kapital* the method of scientific investigation reached a qualitatively new level of development. In Marx’s *Economic and Philosophic Manuscripts* many of the most important of Marx’s ideas had not yet appeared, such as the notion of the dual character of labour, the distinction between abstract and concrete labour.

Rubinstein suggested ‘the principle of unity of consciousness and activity’ which ‘synthesized in one formula the four tenets of dialectical psychology . . . the special nature of the psyche, its active role in human behaviour, the historicity of consciousness and the plasticity of man’s abilities’ (Payne 1968: 149). The appearance and formation of psychological processes takes place within the activity only in the process of the continuous interaction between the individual with the world around him (Rubinstein 2000). Consciousness and, more generally, psychological processes, not only arise from activity, but also form and transform within the activity. Rubinstein disagreed with the identification of psychological processes with the internal and

activity with something external. Activity – in the same way as psychological processes – is a concrete unity of external and internal. In contrast to functionalism, Rubinstein attempted to study not only discrete psychological functions (such as perception, memory, speech, emotion, thinking), but also human psychism (*‘psychika’*) as a whole in its ontogenesis.

The relation between internal and external activity is one of the principal points of controversy between Leontiev and Rubinstein. Rubinstein criticized Leontiev’s conception of internalization as a transformation of external activity to internal, psychic activity. According to Rubinstein (1973), all the external conditions determine the impact on the thinking only refracted through the internal conditions. External causes act through internal conditions. For Rubinstein, Leontiev overstressed the dependence of internal activity on external activity, while not revealing the inner structure and content of psychic activity itself. One of the consequences of Leontiev’s approach to internalization is the reduction of learning to the assimilation of fixed knowledge, of predetermined products and results of the process of cognition. Rubinstein criticized the perspective of reduction of learning to a purely reproductive process, to the simple appropriation of ready-made products of culture and the elimination of the production of new knowledge and new forms of activity. One of Rubinstein’s main achievements is connected with his focus on the active, creative role of the subjects and their non-reproductive, innovative activity.

Rubinstein suggested a more dialectical approach than Leontiev, one which demonstrates the complex interconnection of the internal and external activity, and highlights the importance of subjects in the creative learning process. However, in Rubinstein’s activity theory, as in Leontiev’s theory, there is not a concrete analysis of activity in the particular sociocultural contexts and the description of the particular sociocultural and educational conditions of the transition from the reproductive to creative learning process.

In the 1960s, the reconsideration of activity theory had started. Many Soviet psychologists carried out and published the results of their investigations into the relations between the external activity of children and their correspondent psychological actions. D. Elkonin elaborated an original theory of psychic development based on the principle of leading activity. V.V. Davydov focused on the investigation of collective learning activity, considering internalization as a mode of individual appropriation of forms of collective activity. Galperin developed his theory of the stepwise formation of mental actions (Dafermos 2014).

Cultural-historical activity theory

Cultural-historical activity theory (CHAT) has become one of the most popular in Anglo-Saxon literature over the last two decades. Different versions of cultural-historical activity theory can be found (e.g. Stetsenko and Arievidtch 2004; Yamagata-Lynch 2010). However, there are some similarities between multiple versions of CHAT. In contrast to approaches emphasizing differences between cultural-historical psychology and activity theory, ‘the basic impulse underlying a CHAT approach is to reject this either/or dichotomy’ (Cole and Engeström 2007: 485). Vygotsky, with his concept of cultural mediation, was identified by Engeström (2001) as the first generation of cultural-historical activity. A.N. Leontiev is presented as the founder of the second generation of cultural-historical activity theory. The ‘third generation’ has introduced new conceptual tools such as dialogue, multiplicity of perspectives, the interrelations between defined activity systems, etc., to expand the theoretical framework of activity theory.

Engeström’s periodization creates the risk of interpretation of cultural-historical activity theory in the light of presentism: ‘Presentist history has been described as linear, progressive, continuous, justificationist, or, in short, whiggish – failing to concentrate upon understanding the past

in its true historical context' (Buss 1979: 14). Presentism leads to an examination of the 'third generation' of cultural-historical activity theory as if it were merely a linear culmination of the first and second generations (that is, of Vygotsky's and Leontiev's theories). The consideration of Vygotsky's and Leontiev's theories exclusively from the standpoint of the present conjuncture of cultural-historical activity theory, and the exclusion of Rubinstein's version of activity theory, results in decontextualized accounts of the historical development of cultural-historical psychology and activity theory.

Cole and Engeström describe the following basic theoretical principles used by CHAT: mediation through artefacts; activity as the essential unit of analysis; the cultural organization of human life; adoption of a genetic perspective; an emphasis on the social origins of higher psychological functions; and the ethical and strategic contradiction of intervention research. Some of these principles are associated with cultural-historical psychology (which include a focus on mediation through artefacts, adoption of a genetic perspective, social origins of higher psychological functions and the cultural organization of human life) and other principles with activity theory (for example, a focus on activity as the essential unit of analysis).

Cole and Engeström consider Vygotsky's and Leontiev's writings compatible and plausible and prefer to refer to them as cultural-historical activity theory (Cole 1996; Cole and Engeström 2007). The proponents of the canonical approach consider activity theory as a continuation of cultural-historical psychology (Davydov and Radzikhovskii 1985; Radzikhovskii 1979). The canonical approach of the development of the 'school of Vygotsky-Leontiev-Luria' has been criticized by several authors for ignoring the serious differences between Vygotsky's research programme and the Kharkov group's research programme (Yasnitsky 2011). Toomela (2000) emphasizes differences, discontinuities, and gaps that exist between cultural-historical activity theory and Leontiev's activity theory. According to Toomela (2000: 357), Leontiev's activity theory 'was a "dead end" detour of cultural historical psychology grounded by Vygotsky'. Toomela argues that for Vygotsky the most important 'unit of analysis' was not the concept 'activity', but the concept 'sign meaning'. The eclectic combination of elements or components from different approaches leads to theoretical confusion and questionable practice.

Hakkarainen (2004: 4) argues that Western CHAT accepts 'a multidisciplinary approach while the Russian activity approach is more or less psychological'. A multidisciplinary approach to activity theory has developed at the Center for Activity Theory and Developmental Work Research (University of Finland, Helsinki) led by Yrjö Engeström. Vygotsky, Luria, and Leontiev worked in the context of psychology as a discipline, while the representatives of CHAT developed a multidisciplinary research program.

Many scholars argue that the concept of activity is interdisciplinary by nature (Blunden 2010; Davydov 1999). However, bringing different disciplines together on the basis of activity theory creates many theoretical and methodological questions. For example, Langemeyer and Roth (2006) argue that Engeström's version of CHAT neglects essential aspects of dialectics which are connected with the understanding of contradictions. Moreover, they point out that 'Engeström's notion of activity (and its triangular representation) proves rather indifferent about the broader societal relations that determine practice and by which human activities develop historically' (Langemeyer and Roth 2006: 28).

Activity theory from a critical psychology perspective

The mainstream reception and implementation of activity theory in North Atlantic psychology and pedagogy has been criticized. Ratner (2006) argues that, with few exceptions, activity theorists generally ignore concrete historical forms of organization of social life.

They do not consider concrete activities such as alienated work, or formal education in capitalist society, and the kind of subjectivity that is operative within them . . . they rarely comment on the need for reforming the concrete educational system (e.g., power relations among administrators, teachers, and students; working conditions of teachers; social relations between teachers and students.

(Ratner 2006: 37)

Many activity theorists operate general categories such as subject, object, motive, etc. in a functionalist way, without considering their concrete historical forms and their internal contradictions as a driving force of the development. Marx did not investigate activity in general as an abstract concept, but as labour activity. Marx used such terms as 'labour', 'the productive life', 'work', 'the process of labour', and 'the labour process' (Jones 2009). Moreover, Marx did not investigate labour activity in general, but labour activity in a particular sociocultural context, that of the capitalist mode of production. In contrast to the Finnish/Anglo-Saxon tradition of activity theory, which is based on Engeström's conceptualization, which emphasizes the structural dimensions of activity systems, the German tradition, based on Holzkamp's conceptualization, emphasizes the subject's perspective in theory and methodology. The task of reconstructing categories of psychology as science, which was posed by Holzkamp, was associated with the reconstruction of subjects in their real lives and their emancipation. The elaboration of the concept of subjectivity as a reflective agency was one of the main achievements of German critical psychology. Holzkamp, on the basis of a reconsideration of Leontiev's version of activity theory, offered a sketch of historicization of the human psyche through connecting biological phylogenesis, historical development of society, and individual development.

'Practice research' emerged as an attempt at the further development of German critical psychology through bridging the gap between research methodology and practice. Practice research is based on the production, appropriation, and transformation of knowledge in situated research practices. The concept of practice research was developed under the influence of the theory of situated activity as well as post-structuralism (Nissen 2000). The theory of 'situated activity' emerged in opposition to the traditional cognitive approach, which separates mind from the social world. It emphasizes cultural-historical forms of located, conflictual, and meaningful activity. In contrast to formalistic views of the activity, the situated approaches are invented to contextualize everyday local practices of people and their engagement in processes of human activity (Lave 1993). On the basis of situated approaches, the concept 'community of practice' has been elaborated. The concept 'community of practice' refers to a group of individuals creating their shared identities through participating and contributing to activities of their community (Wenger et al. 2002).

Conclusions

Undoubtedly, the situated approach to activity has offered a creative perspective for bridging the gap between critical research and alternative practice in various fields (education, psychotherapy, social work, etc.), but it 'can be criticized as influenced by relativist postmodern trends' (Nissen 2000: 145). Postmodern relativism can lead to the total rejection of all kinds of 'grand narratives' of the social world as abstract, formal, and meaningless entities and the celebration of the fragmented, local, situated practices. The relativization of social practice could undermine the emancipatory potential of activity theory. For this reason, it is important to elaborate a dialectical framework for the activity theory in order to conceptualize 'relations between persons acting

and the social world' (Lave 1993: 5). Dialectics as a way of thinking brings into focus the *dynamic* and *contradictory* nature of reality which is not constituted by ready-made things, but complex processes: 'To say that activity is dialectical is to appreciate something of the synthetic work that the performance of contradiction always accomplishes' (Parker 1999: 64).

It is difficult to deal with many theoretical and methodological problems of activity theory which remain still unsolved without the elaboration of a dialectical framework. Some of these issues have been identified: 'the nature and role of transformation in activity systems, the relation of collective and individual activity, the relation of activity theory to other theories of human conduct, and the relation of the biological and social in existence' (Roth 2004:7).

In conclusion, we would like to restate Vygotsky's idea that 'practice sets the task and serves as the supreme judge of theory, as its truth criterion' (Vygotsky 1987: 305–306). Hence, we should recognize that a crucial challenge for activity theory from a critical standpoint is to detect real ways for connecting critical theorizing with transformative practice at local, national, and international levels. This challenge has already been posed by Marx in his *Eleventh Theses on Feuerbach*: 'Philosophers have hitherto only interpreted the world in various ways; the point is to change it' (Marx 1975/2005: 4).

Further reading

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Website resources

- Center for Activity Theory and Developmental Work Research (CATDWR): <http://www.edu.helsinki.fi/activity/>
- International Society for Cultural and Activity Research: <http://www.iscar.org>

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