

Cultural-historical activity theory and interventionist methodology: Classical legacy and contemporary developments

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Abstract

The article discusses the growing interest in cultural-historical activity theory (CHAT) and its potential to promote change in work and educational practices through research interventions. Seeds for research interventions in CHAT are identified in the rich heritage of the works of Vygotsky and other classic authors. Particular attention is devoted to Vygotsky's epistemic reasoning in "The Historical Meaning of the Crisis in Psychology" and to his emphasis on the use of an indirect method in psychological investigations. In "The Historical Meaning of the Crisis in Psychology," Vygotsky formulated a program for the development of psychological theory and methodology. The article points out that the future of activity theory depends on the understanding and creative development of this heritage. On this basis, interventionism is presented as a central aspect in CHAT. Historical and theoretical foundations of CHAT are connected to current methodological implementations of interventionist research such as the Change Laboratory, the Clinic of Activity, and the Fifth Dimension.

Keywords

activity theory, Change Laboratory, Clinic of Activity, Fifth Dimension, interventionist methodology

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The Vygotskian legacy

The development of psychological theories has been historically intertwined with the development of intervention methods. Experiments are one of the classic types of interventions in psychology (Danziger, 1985). Clinical therapies, for instance in the Freudian tradition (Freud, 1963), are another. The early work of Piaget on the clinical interview (Duveen, 2000; Ginsburg, 1997) is an example of how an intervention method serves the development of a psychological theory. Also Lewin's action research (1946), meanwhile, is an intervention method strongly intertwined with his field theory. A recent example of this interconnection may be seen in the work of Sarason (1972) on the creation of settings.

There is a need within psychology to develop dynamic process-oriented and transformative methodologies (Toomela & Valsiner, 2010; Valsiner, Molenaar, Lyra, & Chaudhary, 2009). Cultural-historical activity theorists have from the very beginning been particularly aware of the interconnection between theory and transformative methodologies, which we refer to with the generic term of intervention in this special issue. Vygotsky's work "The Historical Meaning of the Crisis in Psychology" (1997) is probably the most compelling evidence of such awareness. In this text Vygotsky unambiguously expresses the need for a psychological science that progresses by changing practices:

[P]sychology was *first* (through industrial psychology, psychiatry, child psychology, and criminal psychology) confronted with a highly developed—industrial, educational, political, or military—practice. This confrontation compels psychology to reform its principles so that they may withstand the highest test of practice. It forces us to accommodate and introduce into our science the supply of practical psychological experiences and skills which has been gathered over thousands of years; for the church, the military, politics, and industry, insofar as they have consciously regulated and organized the mind, base themselves on an experience which is enormous, although not well ordered from the scientific viewpoint (p. 305)

Although Vygotsky does not use the term "intervention," the kind of new psychology that he foresees is obviously interventionist: that is, a psychology with appropriate methodological tools to develop its theories while analyzing and changing practices:

A psychology which is called upon to confirm the truth of its thinking in practice, which attempts not so much to explain the mind but to understand and master it, gives the practical disciplines a fundamentally different place in the whole structure of the science than the former psychology did. There practice was the colony of theory, dependent in all its aspects on the metropolis. Theory was in no way dependent on practice. Practice was the conclusion, the application, an excursion beyond the boundaries of science, an operation which lay outside science and came after science, which began after the scientific operation was considered completed. Success or failure had practically no effect on the fate of the theory. Now the situation is the opposite. Practice pervades the deepest foundations of the scientific operation and reforms it from beginning to end. Practice sets the tasks and serves as the supreme judge of theory, as its truth criterion. It dictates how to construct the concepts and how to formulate the laws. (p. 306)

Vygotsky provides a framework for radically reconceptualizing the methodology of psychological inquiry, taking seriously into account the necessity to ground psychology in human practices:

The most complex contradictions of psychological methodology are transferred to the grounds of practice and only there can they be solved. There the debate stops being fruitless, it comes to an end. "Method" means "way," we view it as a means of knowledge acquisition. But in all its points the way is determined by the goal to which it leads. That is why practice reforms the whole methodology of the science. (p. 306)

"The Historical Meaning of the Crisis in Psychology" includes an overview of attempts made in the field of psychology to build solid methods which would serve the development of psychological theories. Referring to the classic experiments, for instance, Vygotsky writes that many psychologists have viewed the introduction of the experiment as a fundamental reform of psychology and have even equated experimental and scientific psychology. They predicted that the future would belong solely to experimental psychology and have viewed this epithet as a most important methodological principle. "But in psychology the experiment remained on the level of a technical device" (pp. 309–310). According to Vygotsky these attempts failed precisely because they were not meant to be applied to human practices:

[A]long with the introduction of the experiment there evolved a paradoxical situation which would be unthinkable in the natural sciences: equipment equivalent to the first steam engine or the telegraph was well known in the laboratories but not applied in practice. Education and law, trade and industry, social life and medicine were uninfluenced by this movement. To this very day it is considered a profanation of the investigation to connect it with practice and it is advised to wait until psychology has completed its theoretical system. But the experience of the natural sciences tells us another story. Medicine and technique did not wait until anatomy and physics celebrated their ultimate triumphs. It is not only that life needs psychology and practices it in different forms everywhere: we must also expect an upsurge in psychology from this contact with life. (p. 308)

Vygotsky points out the need for psychology to adopt what Marx called "the reverse method" (p. 235), namely paths of investigation which reverse the path taken by nature. Natural paths of investigation suggest moving from the simplest psychological formation as it can be observed in the ape to the highest complexity of human psychology. Instead, according to Vygotsky:

[T]he investigator need not always follow the same path that nature took; often the reverse path is more advantageous. ... A certain stage of development and the process itself can only be fully understood when we know the endpoint of the process, the result, the direction it took, and the form into which the given process developed. ... Having arrived at the end of the path we can more easily understand the whole path in its entirety as well as the meaning of its different stages. (p. 235)

A methodological approach based on the path taken by nature relies on gathering objective data through direct observations of external manifestations. According to Vygotsky, this

orientation has emerged in empirical psychological inquiries "not because of any factual difference in the phenomena, but rather because of the inapplicability and epistemic barrenness of psychological categories and concepts" (p. 235). Vygotsky gives the example of reflexology, which represents a turning point in the history of psychological research in that, unlike preceding traditional psychology, it reoriented the methods of investigation toward the paths taken by nature:

Formerly the animal mind was defined and described in concepts and terms acquired in the study of man. Nowadays the behavior of animals gives "the key to the understanding of the behavior of man," and what we call "human" behavior is understood as the product of an animal which, because it walks and stands erect, has a developed thumb and can speak. (p. 236)

Reflexology in fact aimed at explaining complex human psychological functions starting from the simplest ones observed in the animals. Quoting Pavlov's *Lectures on Conditioned Reflexes*, Vygotsky (p. 236) points out that the epistemic reasoning behind this new orientation in the history of psychology was the notion that the elementary can be conceptualized even if we lack appropriate concepts for grasping complex formations, while complex formations cannot be conceptually grasped without appropriate concepts for understanding the elementary.

Vygotsky's epistemic reasoning in "The Historical Meaning of the Crisis in Psychology" diverts from these two orientations in the history of psychology because, according to him, "the highest scientific abstraction contains an element of reality" and, vice versa, "even the most immediate, empirical, raw, singular natural scientific fact already contains a first abstraction" (p. 249). Also, "if at the root of every scientific concept lies a fact ... at the basis of every scientific fact lies a concept" (p. 250). This relationship between concepts and facts is intertwined with the use of language. Using Goethe's words, Vygotsky writes that "everything described as a fact is already a theory" (p. 249). Scientific acquisition of facts utilizes but also continuously tests them in a more or less explicit debate with previous concepts:

Any word is a theory. To name an object is to apply a concept to it. Admittedly, by means of the word we wish to comprehend the object. But each name, each application of the word, this embryo of science, is a critique of the word, a blurring of its form, an extension of its meaning. ... Finally, each discovery in science, each step forward in empirical science is always at the same time an act of criticizing the concept. (p. 251)

Marx's notion of "the reverse method" is further developed in "The Historical Meaning of the Crisis in Psychology" with the notion of an "indirect method." This method, according to Vygotsky, should be used within psychological investigations in order to be able to uncover the complexity of reality, which is not immediately accessible as elementary facts in traditional empirical inquiries. Psychology, according to Vygotsky, must proceed as other sciences do in the study of what is not immediately given. The indirect method consists in reconstructing or re-creating the object of study through interpretation of its traces and influences (p. 272). This can be done with the help of specifically constructed instruments.

The indirect method invests the instruments used in empirical research with "a new role ... which is not always obvious" (p. 273). In traditional experimentation, instruments are used to amplify the sensory perception of the experimenter, who has direct access to the phenomena under scrutiny. In order to explain the difference between instruments used in traditional experiments and those serving the indirect method, Vygotsky uses the example of the microscope and the example of the thermometer:

The use of a thermometer is a perfect model of the indirect method. After all, we do not study what we see (as with the microscope)—the rising of the mercury, the expansion of the alcohol—but we study heat and its changes, which are indicated by the mercury or alcohol. We interpret the indications of the thermometer, we reconstruct the phenomenon under study by its traces, by its influence upon the expansion of a substance. ... To interpret, consequently, means to re-create a phenomenon from its traces and influences relying upon regularities established before (in the present case—the law of the extension of solids, liquids, and gases during heating). There is no fundamental difference whatsoever between the use of a thermometer on the one hand and interpretation in history, psychology, etc. on the other. (p. 273)

Vygotsky emphasizes that the use of the indirect method in psychological investigations is a necessity if psychology wants to overcome the historical separation between concepts and facts:

For psychology the need to transcend the boundaries of immediate experience is a matter of life and death. The demarcation, separation of the scientific concept from the specific perception, can take place only on the basis of the indirect method. The reply that the indirect method is inferior to the direct one is in scientific terms utterly false. Precisely because it does not shed light upon the plenitude of experience, but only on one aspect, it accomplishes scientific work: it isolates, analyzes, separates, abstracts a single feature. After all, in immediate experience as well we isolate the part that is the subject of our observation. (p. 274)

The indirect method is substantively an interpretive method. Vygotsky argues for this way of acquiring knowledge in psychology by referring to the way the basic coupling of a reaction to a stimulus has been traditionally understood in the history of psychology and to the advantage of understanding it with the help of interpretation:

The very concept of reaction implies the necessity of interpretation, of sense, connection, relation. Indeed, *actio* and *reactio* are concepts that are originally mechanistic—one must observe both and deduce a law. But in psychology and physiology the reaction is not equal to the stimulus. It has a sense, a goal, i.e., it fulfills a certain function in the larger whole. It is qualitatively connected with its stimulus. And ... this quality of the interrelation, is not given in experience, but found by inference. To put it more easily and generally: when we study behavior as a system of reactions, we do not study the behavioral acts in themselves (by the organs), but in their relation to other acts—to stimuli. But the relation and the quality of the relation, its sense, are never the subject of immediate perception, let alone the relation between two heterogeneous sequences—between stimuli and reactions. The following is extremely important: the reaction is an answer. An answer can only be studied according to the quality of its relation with the question, for this is the sense of answer which is not found in perception but in interpretation. (p. 276)

Vygotsky argues that psychology must rely on indirect methods of interpretive analysis and experimentation, much as Marx did it in creating *Das Kapital*:

[A]nalysis and experiment presuppose *indirect* study. From the analysis of the stimuli we infer the mechanism of the reaction, from the command, the movements of the soldiers, and from the form of the fable the reaction to it. Marx says essentially the same when he compares abstraction with a microscope and chemical reactions in the natural sciences. The whole of *Das Kapital* is written according to this method. Marx analyses the "cell" of bourgeois society—the form of the commodity value—and shows that a mature body can be more easily studied than a cell. He discerns the structure of the whole social order and all economical formations in this cell. He says that "to the uninitiated its analysis may seem the hair-splitting of details. We are indeed dealing with details, but such details as microscopic anatomy is also dealing with." He who can decipher the meaning of the cell of psychology, the mechanism of one reaction, has found the key to all psychology. (p. 320)

Referring to Engels, Vygotsky writes that "one steam engine demonstrates the law of transformation of energy no less convincingly than 100,000 engines" (p. 309). This one steam engine, however, is of a particular form; it is the "cell" of all steam engines, that is, the process of production of steam devoid of all additional features. It is "a *pure* form ... it represents the process in a pure, independent, and undistorted form" (Engels as cited by Vygotsky, p. 321).

In "The Historical Meaning of the Crisis in Psychology," Vygotsky formulated a program for the development of psychological theory and methodology. This program requires the application of dialectical materialism through an indirect method for studying human practices:

The direct application of the theory of dialectical materialism to the problems ... of psychology is impossible, just as it is impossible to apply it directly to history and sociology. ... Like history, sociology is in need of the intermediate special theory of historical materialism which explains the concrete meaning, for the given group of phenomena, of the abstract laws of dialectical materialism. In exactly the same way we are in need of an as yet undeveloped but inevitable theory of ... psychological materialism as an intermediate science which explains the concrete application of the abstract theses of dialectical materialism to the given field of phenomena. ... In order to create such intermediate theories—methodologies, general sciences—we must reveal the essence of the given area of phenomena, the laws of their change, their qualitative and quantitative characteristics, their causality, we must create categories and concepts appropriate to it, in short, we must create our own Das Kapital. It suffices to imagine Marx operating with the general principles and categories of dialectics, like quantity-quality, the triad, the universal connection, the knot [of contradictions], leap, etc.—without the abstract and historical categories of value, class, commodity, capital, interest, production forces, basis, superstructure, etc.—to see the whole monstrous absurdity of the assumption that it is possible to create any Marxist science while bypassing Das Kapital. Psychology is in need of its own Das Kapital—its own concepts of class, basis, value, etc.—in which it might express, describe and study its object. (p. 330)

In the last pages of "The Historical Meaning of the Crisis in Psychology," Vygotsky spells out what can be seen as his still largely unfulfilled testament statement:

Our science will become Marxist to the degree that it becomes truthful and scientific. And we will work precisely on making it fruitful and to make it agree with Marx's theory. ... We cannot master the truth about personality and personality itself so long as mankind has not mastered the truth about society and society itself. In contrast, in the new society our science will take a central place in life. (pp. 341–342)

"The Historical Meaning of the Crisis in Psychology" was originally written in 1926, eight years before Vygotsky's death. For political reasons during his last years he could not pursue this program and neither could his closest colleagues do so for several years after his death. When Stalin succeeded Lenin in 1924, the Soviet Union gradually turned into a dictatorship. This led to 30 years of stagnation during which intellectuals and academics who deviated from the Stalinist ideology were politically attacked for their work and eventually eliminated. Vygotsky's colleagues had to flee to Ukraine for safety. The years when Vygotsky and his colleagues were all in Moscow were, claims A.A. Leont'ev (2005), a dangerous time: "The position of Vygotsky and his team at the Institute of psychology became less and less secure with each year" (p. 27). From this period on, it became increasingly difficult for these scholars to pursue their work. The pedologist movement in which Vygotsky was involved was condemned, and even after Vygotsky's death, his books were taken away from his archives.

However, Stalinism was not immediately seen as a reactionary and anti-human regime. The communist ideals in the Soviet Union were highly human and millions of people believed that in the name of these ideals they were all building a better future. In the years when Stalin was in power, few in the West could understand the extent of the internal terror in Soviet Union. Great intellectuals like Jean-Paul Sartre and prominent artists like Pablo Picasso were supporters of Soviet communism, which they considered as a real alternative to capitalism and American imperialism. Only in the late 1950s did the horrors of Stalinism gradually begin to come to light. The realization of what actually happened in the Soviet Union during the regime of Stalin led numerous scholars from all over the world to turn their attention to banned or previously unknown works produced by Russian academics.

A few years after Stalin's death, A.N. Leont'ev received the Lenin Prize. This was an important sign that the new kind of psychology initiated by Vygotsky was finally acceptable. This event, however, was not a sign of a consistent positive atmosphere with regard to the work of these scholars. As late as the 1980s, scholars such as Davydov were prevented at times from traveling abroad. Until 1990, when the Soviet Union ceased to exist, the legacy of Stalin continued and the state system he built continued to be based on coercion and extreme control. The reception of the interventionist legacy of Vygotsky within cultural-historical activity theory (CHAT) must be understood in the context of this complex historical framework.

Today there is a rapidly growing interest across behavioral and social sciences in CHAT. A recent special issue (Holzman, 2006) of *Theory & Psychology* was specifically devoted to activity-theoretical contributions to current interdisciplinary debates. The growing interest in this theory also concerns its potential to promote change in work and educational practices through research interventions. Seeds for research interventions in activity theory can be found in the rich heritage of the works of Vygotsky, Luria, Leont'ev,

and other classic authors. The future of activity theory depends on the understanding and creative development of this heritage.

The legacy in action: Current interventionist approaches

A number of intervention methods have been developed in the past 20 years inspired by the Vygotskian legacy. Key examples of these methods are the Change Laboratory, the Clinic of Activity, and the Fifth Dimension. The Change Laboratory is an intervention toolkit developed in Finland for promoting change in workplaces, used by researchers and practitioners within the broad methodological framework of developmental work research. The Clinic of Activity is an interventionist approach developed in France. It focuses on the way practitioners experience the object of their work, with the aim of understanding and transforming ordinary work activities by bringing together researchers and practitioners to share psychological analyses of work. The Fifth Dimension is a computer-mediated activity for children originally developed in the United States. It focuses on collaborative learning and development in partnerships between universities and local communities.

The present special issue discusses interventionism as a central aspect in CHAT. The six contributions connect the historical and theoretical foundations of CHAT with current methodological implementations of interventionist research. The Change Laboratory, the Clinic of Activity, and the Fifth Dimension are presented as main examples of contemporary intervention methodologies based on CHAT. The papers examine basic tenets of activity theory as interventionist theory and scrutinize the three methodological attempts to pursue and develop this interventionist legacy. The authors also engage in discussion with other interventionist approaches in psychology, such as various strands of action research in the Lewinian tradition (Lewin, 1946), Sarason's (1972) creation of settings, and Brown's (1992) design experiments.

The special issue includes six articles by contributors from five countries. All contributors write about the classical legacy and creative development of the works of Vygotsky, Leont'ev, and other representatives of CHAT. The contributors have in their recent work engaged in theoretical discussions and produced empirical analyses on methodologies of intervention within the tradition of CHAT. The special issue brings together these scholars, already involved in meta-theoretical discussions on the methodology of CHAT, to illustrate and substantiate their theoretical and methodological arguments with data and cases of their own.

This special issue is a first attempt to bring together and discuss these methods. The importance of these methods for the further development of CHAT has also not thus far been the explicit focus of a systematic analysis. In the following, the contributions are discussed in the order in which they appear in the special issue.

Annalisa Sannino's (2011) article contributes to the current discussion on potential shortcomings of contemporary works within activity theory. Critiques maintain that subjectivity is neglected in activity-theoretical studies. Limitations of the well-known triangular representation of activity are often highlighted as evidence of omission of key issues originally central in the works of the founders of activity theory.

The article documents the history of activity theory as an activist and interventionist approach. Since Vygotsky's works with illiterates, practically all the founders of CHAT—for instance, Luria, Leont'ev, Galperin, and Davydov—have engaged in various kinds of interventions in multiple settings. Responding to the critiques, Sannino argues that, combined with design and implementation of material transformations, structural models of activity do not exclude subjectivity, sensuous experience, emotion, and ethico-moral issues. These dimensions of activity are embedded in collective change efforts in which both the models and the voices of corporeal subjects act as mediators.

Two interventionist epistemological principles stemming from the history of activity theory are presented, namely the principle of double stimulation and the principle of ascending from the abstract to the concrete. These principles are behind the dynamics of transformation toward what Vygotsky called "higher psychological functions." Double stimulation may be seen as the principle underlying the genesis of will. Ascending from the abstract to the concrete may be seen as the principle behind the genesis of theoretical generalization. Elaboration on the intertwined nature of these two epistemological principles is seen as a key challenge for future activity-theoretical interventionist research.

Sannino's article examines three interventionist methods in activity theory—the Change Laboratory, the Clinic of Activity, and the Fifth Dimension—as examples of application of the two epistemological principles. In spite of their differences, the three can be seen as consistent attempts to put into practice the interventionist epistemology of activity theory. They are also ways of elevating the themes of subjectivity and conceptual models explicitly to the level of methodology.

Yrjö Engeström's (2011) article questions the potential of design experiments in research on learning. The article argues that design experiments suffer from an unquestioned assumption of the linear progression of the methodology which ignores the learners' agency. Referring to sociological literature, Engeström points out the necessity to carefully take into account resistance and subversion as elements of interventions which inevitably divert from the linear perspective offered by literature on design experiments.

Formative interventions based on Vygotsky's methodological principle of double stimulation are introduced as a way to foster collective agency in interventions. Engeström's article analyzes a Change Laboratory formative intervention, conducted to transform the way of working in the surgical unit of a university hospital facing a nearcrisis situation. Grounded in data from the case, the article offers an argumentative grammar of formative interventions based on four epistemic threads.

The first thread concerns the material use of the model of the activity system as unit of analysis by the practitioners and the researchers in the intervention. Through the intervention the conceptual representation of the activity system becomes a concrete auxiliary tool which mediates the analysis and redesign of the current activity. This way the unit of analysis ceases to be a model solely for academic inquiries and becomes part of the practitioners' own ongoing activity. The second epistemic thread concerns the notion of contradictions as a source of change and development. The redesign of the current activity and the emergence of the new arise from below, through analyses of the contradictions in the current activity of the practitioners. The

third epistemic thread includes agency as a layer of causality, together with an interpretive layer and a contradictory layer. These layers of causality grant participants in interventions not only their own interpretations of the activities that they inhabit, but also the possibility that their motives might be contradictory and the potential to initiate individual and collective actions of transformation of their current circumstances. The fourth epistemic thread concerns the formation of a new concept for the practitioners' activity, unknown at the beginning of the intervention to all participants, the interventionist included.

Through the lenses of these four epistemic threads, formative interventions appear as characterized by multiple layers of reformulation of the initial problem to be tackled (first stimulus) and of the conceptual tools representing the practitioners' activity system (second stimuli). In the case of the hospital, a new organizational chart was progressively developed from a 1-page diagram to a 10-page document in which an increasing precision was reached. The organizational chart served as a material anchor for actual change actions for implementing the model in the surgical unit. A formative intervention is depicted as a dynamic longitudinal constellation in which stimuli are layered and the objectives are constantly moving.

Jaakko Virkkunen and Marika Schaupp's (2011) article is an attempt to systematize the principle of ascending from the abstract to the concrete and the principle of double stimulation in relation to interventions within CHAT. By referring to ongoing societal transformations in complex and rapidly changing activity systems, the article points at the increasing importance of theoretical generalization as a type of thinking which has the potential to grasp essential relationships at the core of the development of interconnected activity systems.

The authors analyze empirical data from a Change Laboratory, focusing on the competence and actions of an in-house developer within a Finnish road-building company. The competence and actions of the in-house developer expanded toward a developmental activity based on theoretical thinking. This type of thinking allows the addressing of inner contradictions of activity systems in the process of analyzing and modeling new solutions.

The empirical case analyzed in Virkkunen and Schaupp's article shows the in-house developer's intuitive critical orientation towards given key tools in her work, such as tools of team building and team coaching, which abstracted human relations from the concrete activities of the production team's work. The intuitive orientation found its contents and was articulated when the in-house developer acquired tools to carry out theoretical analysis of activity systems as part of the Change Laboratory intervention method. These new tools created a situation of double stimulation for participants in the intervention and for the in-house developer in particular, and allowed a redefinition of her zone of proximal development.

The article by Deborah Downing-Wilson, Robert Lecusay, and Michael Cole (2011) establishes the ground for a spatial expansion of the concept of activity by focusing on the idea of decentralization of an activity. Activities are viewed as taking shape in many places and without being carried out by a centralized set of actors.

The authors contrast two strategies of collaborative after-school interventions between universities and local community organizations, namely the strategy of design

experimentation and the strategy of mutual appropriation. Differences as well as shared theoretical assumptions of the two strategies are highlighted. The two approaches are similar in that they are both guided by similar cultural-historical principles. They both strive to create functional systems of interaction and focus on culturally organized activities in university/community settings.

The Fifth Dimension after-school activity system is described and examined as a form of design experiment intervention. It is characterized by the authors as an "upside down" form of design experimentation, in which a productive after-school activity system proven over the past two decades is received, rearranged, or rejected by partner institutions. The authors provide the example of a club with a large variety of activities ranging from art and crafts to board games and outdoor sports that successfully merged with the Fifth Dimension. Yet the Fifth Dimension site in the end did not fit into the community organization and was closed down during a two-year period in which the club had to undergo renovation of its infrastructures and was not reinstituted after the renovation was completed. Attempts to open the Fifth Dimension site in a nearby club also failed.

As an example of the use of the strategy of mutual appropriation, the authors report on the application of the Fifth Dimension model in a community learning center for the residents of a large apartment complex in a neighborhood of a major American city. While in the design experimentation intervention the university had the main responsibility for establishing partnerships with other organizations, in the mutual appropriation strategy hybrid activities were initiated as a result of discussion among all partners. Mutual appropriation is further defined as a strategy through which participants not only mutually appropriate their activities but also act in ways that are mutually appropriate. The Fifth Dimension morphs, not only in encapsulated forms of partnerships, but also in forms of partnership which involve mutual appropriation. The Fifth Dimension afterschool interventions between universities and local community organizations are consequently broadened in scope, having to address not only the development and well-being of the children but also the intertwined development and well-being of their families and local community.

In Yves Clot and Katia Kostulski's (2011) article a Clinic of Activity intervention is designed on the basis of four aspects of work. The article is also an analysis of the work of the interventionists themselves.

The four aspects of work are: the impersonal, which refers to the prescriptive features of work; the interpersonal, which refers to dialogues between professionals; the transpersonal, which refers to the history of the work and its "professional genre"; and the personal, which refers to the individual and subjective way of performing the work and which is inherently in tension with the three other aspects. The potential of creative transformation of work activities lies in the possibilities opened within interventionist work to address tensions between these four aspects of work.

Clot and Kostulski give an account of theoretical and methodological principles of the interventionist approach called the Clinic of Activity, an approach that has been applied for about two decades in France, but that has scarcely been presented in English within a wider international context. Besides the four aspects of work presented above, other central theoretical distinctions within this approach concern what the authors call the prescribed activity (i.e., the activity expected by the management), the realized activity

(i.e., the actual result of the work of practitioners), and the reality of activity (i.e., the mostly hidden complex and contradictory core of an activity, which can be disclosed through the process of intervention).

The intervention study presented in the article is a case of educators working within a youth judicial protection service in centers for emergency placement of minors. As an intervention, the case did not proceed as expected and could be regarded as a failure. Ultimately what was commissioned to be an intervention for developing the professional profile of the educators in the organization became an analysis of the organization's institutional crisis. The diagnosis proposed by the interventionists was that the impersonal dimension of work (i.e., its institutional features) was underdeveloped while at the same time personal defenses among educators were increasingly manifesting themselves as ways to indicate the unbearable crisis in the organization. The lesson learned from the intervention was the need for the institution to engage in a collective initiative to face the crisis within the work organization. The intervention in spite of its limitations made it possible to open up a zone of proximal development between the management and the team of educators to question the object of their activity and the underdevelopment of their work.

Berthel Sutter's (2011) article points out the necessity of transcending the simplistic notion of intervention as separated from theory. Going beyond interventions means to problematize interventionism as a sterile and atheoretical technique.

The author criticizes the units of analysis currently used within CHAT as dominated by the researchers' views and theories without including those developed by all partners. A review of interventionist research conducted by the author and his colleagues results in a suggestion of a model for developmental activity research. The conclusion of the author is that cultural-historical methodology may be expanded to go beyond interventionism: that is, to include in the analysis the resources that the participants of the "other activity" also potentially provide for developing the research activity itself.

The special issue includes two commentaries. The first commentary is written by Falk Seeger (2011), an educational psychologist. The second commentary is authored by Frank Blackler (2011), an expert in organizational behavior and change. The commentaries open up a set of unexplored challenges. The entire special issue may be seen as an invitation to collective explication and development of interventions as the methodological foundation of CHAT.

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