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Foucault and Leontyev

Foucault, Vygotsky, Leontyev – some remarks

Aleksei N. Leontyev, like Lev S. Vygotsky and Alexander R. Luria, is known as one of the founding fathers of cultural-historical activity theory (CHAT, see Cole 2005), which is becoming one of the main paradigms in current educational investigation (Engeström 2005; Cole & Engeström 2007). CHAT is just one variant of a broader approach, sometimes called socio-cultural studies (Wertsch, Del Rio & Alvarez 1995), and sometimes cultural-historical psychology (Chaiklin 2001) or socio-cultural psychology (Valsiner & Rosa 2007). Common to these theories is their emphasis on the culturally mediated and developmental character of human activity, whereas their interpretations of the nature of mediation vary fundamentally.

Although the approach emphasises the historical (or developmental) analysis of the educational world, paradoxically there is a lack of research on its history (Stetsenko 2003). The few debates there are only concern the relation between the founding fathers, especially between

Vygotsky and Leontyev (Sokolova 2002)¹, and more theoretically oriented analyses are rare or non-existent.

In this article I apply some of Michel Foucault's ideas to a developmental analysis of the cultural-historical approach. I locate the works of Vygotsky and Leontyev in the discursive practices of Soviet science, and identify continuities and ruptures in the development of the discursive practices of cultural-historical theory. Vygotsky and Leontyev contrasted their ideas with "old psychology", claiming their own vision as a new paradigm. This makes the question of how "the new" emerges from "the old" an interesting one.

Foucault states in *Archaeology of Knowledge* that the concept of the epistemological break is a simplification given the assumption that there is one point in the development of scientific theories at which the break happens. He defines several thresholds of discontinuity in the development of science. The first is the threshold of positive discourse, the moment at which the discourse achieves individuality and autonomy; the second is the threshold of epistemology at which the rules and norms covering the verification of knowledge are articulated; the third is the threshold of science, the phase in which the rules and laws covering the formation of propositions are established; and the last is the threshold of formalisation, which marks the means and strategies for the legitimisation of the discourse (Foucault 1991a, pp. 186–189).

In the case of the Cultural-historical school I will show how thematic continuity on one plane is related in a very complicated way to discontinuities on other planes in the development of the theoretical apparatus. The recognition of this categorical dialectic also enhances understanding of the broader history of the cultural-historical tradition, which is full of twists and turns, and is far from simple linear progress from one generation to another.

My analysis proceeds in three steps. First I will show how Vygotsky's work represents a move through Foucault's first two thresholds. Sec-

¹ Vygotsky is acknowledged as one of the classic educational thinkers (Daniels, Cole & Wertsch 2007; Langford 2005; Kozulin, Gindis, Ageyev & Miller 2003; van der Veer 2007), whereas Leontyev is rarely cited outside of CHAT discourse.

only I will show how the contradictions inherent in Vygotsky's work were resolved in Leontyev's Activity Theory. Finally I offer an interpretation, inspired by Foucault, of the relations between cultural psychology and Activity Theory.

From positive discourse to new epistemic rules

The first phase in Vygotsky's thinking, which I call socio-behaviourism here, incorporates his pre-cultural-historical works up to 1927, from his early writings and the first books *Psychology of Art* (1971) and *Educational psychology* (1997a) to his essay on the crisis of psychology (1997c). During this period he defined consciousness as the object of his studies (positive discourse), but did this in such a socio-behaviourist explanatory framework (epistemological barrier) that it was clearly at odds with his aim to develop a genuine cultural psychology.

Looking for a positive research object

According to Vygotsky, consciousness cannot be neglected without distorting the research object of psychology. In this he makes a critical comment on his contemporary behaviourism: "By ignoring the problem of consciousness psychology has deprived itself of access to the study of some rather complex problems of human behaviour. It is forced to restrict itself to explaining no more than the most elementary connections between a living being and the world." (Vygotsky 1997b, p. 63) In order to understand human activity we have to accept consciousness as a phenomenon in its own right, having its basis in social interaction between human beings, and especially in speech.

Here Vygotsky conceptualises both interaction and speech in terms of special *reaction-reflexes*, which he also calls reversible reflexes. These are reflexes to irritants that can be created by man. They constitute the foundation of social behaviour and serve for the collective co-ordination

of activity. Reflexes coming from other people have a special role because “they make me comparable to another, and make my actions identical with one another. *Indeed, in the broad sense, we can say that the source of social behaviour and consciousness lies in speech.*” (Vygotsky 1997b, p. 77, emphasis added). Thus, according to Vygotsky, consciousness is a real issue in human psychology and therefore we cannot exclude it from our scientific vocabulary.

At the same time he emphasises the objectiveness of his approach and sees a clear need for an objective psychology. Scientific psychology “must materialize [the facts of consciousness], translate what objectively exists into an objective language, and once and for all unmask and bury the fictions, phantasmagoria, etc.” (Vygotsky 1997b, p. 67) He understands the human personality as “fully determined by the social environment”, claiming that, “personal experience is formed and organized as a copy of the organization of the various elements in the environment.” (Vygotsky 1997g, pp. 157–158) Consequently, consciousness is “wholly reduced to the transmitting mechanisms of reflexes operating according to general laws” (Vygotsky 1997b, p. 73). He concludes that we do not need to assume any other processes except reflexes and reactions in order to explain the whole mechanism of the human mind. The Cartesian problematic is resolved here by neglecting the active psyche, or in the words of Merlin Donald, consciousness is explained by explaining it away (Donald 1991).

Here the theoretical context of Vygotsky’s discourse is explicitly behaviourism (Pavlovian reflex-theory, reactology, reflexology and American behaviourism). He is committed to it, to its concepts and to the attempt to create an objective psychology. This is clearly reflected in the titles of his presentations from this period – *The methods of reflexological and psychological investigation* (Vygotsky 1997e) and *Consciousness as a Problem for the Psychology of Behavior* (Vygotsky 1997b). Yet, he wishes to make consciousness a central object of psychology, which obviously contradicts his behaviourist vocabulary. The explanatory categories and the definition of the subject matter of research are seemingly not in balance. The behaviourist vocabulary forms an

epistemological barrier, which has to be overcome in order to make theoretical steps forward possible. This “resistance of the object” (Holzkamp 2006) results in the reformulation of the explanatory concepts in the next step of his thinking.

Mediation by tools

Vygotsky was interested in the *differentia specifica* of the human mind, in its culturally mediated nature and in the capacity of humans to master their own activities. This leads to the question of how this self-directed activity is possible. His first answer was that the signs are tools, instruments that mediate human behaviour. He illustrates this idea of instrumentally mediated activity in his famous triangle (Figure 1).

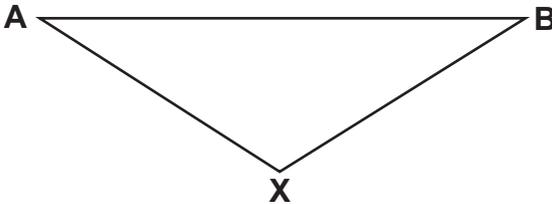


Figure 1. Mediated activity (Vygotski 1929, p. 420).

Here Vygotsky breaks away from behaviourism and presents a new mediational – or maybe one could even say the first really mediational – cultural model of the human mind. However, the concept of the sign is used only in the meaning of a tool-like, instrumental device. There is some ambivalence, even incongruousness in this conception.

He draws an analogy between tools and psychological instruments, which he also calls artificial psychological tools and which by their nature are social and not organic devices. They are “directed toward the mastery of (mental) processes – one’s own or someone else’s – *just as technical devices* are directed toward the mastery of processes of nature.”

(Vygotsky 1997d, p. 85, emphasis added) The sign as a tool reorganises the whole structure of psychological functions. It forms a structural centre, which determines the composition of the functions and the relative importance of each separate process. “The inclusion in any process of a sign remodels the whole structure of psychological operations,” just as the inclusion of a tool reorganises the whole structure of a work process. (Vygotski 1929, p. 421.)

He further emphasises the mediated nature of human activity but does not assign a qualitatively new role to psychological tools, which are just like any other tools. “We should not conceive of artificial (instrumental) acts as supernatural or meta-natural acts in accordance with some new, special laws”. Artificial acts are natural as well. They can, without exception, to the very end be decomposed and reduced to natural acts, just as any machine (or technical tool) can, without exception, be “decomposed into a system of natural forces and processes” (Vygotsky 1997d, p. 86). The higher forms of behaviour “have no more means and data at their disposal than those which were shown by the lower forms of that same activity.” (Vygotski 1929, p. 418.)

This instrumental argument concerning the nature of signs is also very explicitly made in the *Essay of the History of Behavior*. Here Vygotsky and Luria use the concept of *re-arming* to describe the cultural mechanism of development. As it is developing the child not only grows and matures, but also acquires a number of new skills and adopts new forms of behaviour. In the process “the child not only matures, but is *re-armed*. It is this “re-arming” that accounts for a great deal of the development and changes we can observe as we follow the transition from child to civilized adult.” (Luria & Vygotsky 1992, p. 110) These behavioural devices, acquired in the process of cultural development, “alter the fundamental psychological functions of the child, *arm them with new weapons* and develop them.” (Luria & Vygotsky 1992, p. 117, emphasis added) Vygotsky states in *Concrete Human Psychology* from 1929: “The essence of intelligence lies in tools” (Vygotsky 1989). In referring to re-arming, to weapons of development, he is very clearly emphasising the instrumental interpretation of the tool-like function of signs.

The concept of the psychological tool is a transitional phenomenon (Keiler 1999; 2002); in using it Vygotsky makes a breakthrough from socio-behaviourism to mediational and thus cultural analysis. His understanding of the function of the sign, however, changes radically in the next step of his theory, as shown below.

Semiotic mediation

In his late works Vygotsky re-evaluates the concept of personality (even in 1930; Vygotsky 1997f), including the idea of the experiencing subject in his theoretical framework (Vygotsky 1994; 1998) and finally reformulating the concept of the sign (Vygotsky 1987; 1997h). The concept of the zone of proximal development as a specification of socio-genetic law does not appear until this phase of his thinking (Chaiklin 2003). On the methodological level there is a clear transition from the instrumental method to semiotic analysis.

The fact that the two conceptions of the sign, the instrumental and the semiotic, are present simultaneously, side by side, in this phase of Vygotsky's work makes it extremely difficult to reconstruct his argumentation. It seems to me, however, that the semiotic interpretation takes the dominant role in his late works. Consequently, I claim that only the transition from the instrumental to the semiotic completes the shift from socio-behaviourism to his mature cultural-historical psychology.

Vygotsky emphasises that, "The central fact of our psychology is the fact of mediation" (Vygotsky 1997h, p. 138). Now, however, the concept of psychological tools is missing and the higher functions are defined as something qualitatively new that one cannot reduce to lower functions, and the mediation is analysed in terms of sign-mediated social interactions.

If the lower forms of activity are characterised by the immediacy of psychological processes, *the higher psychological functions are characterised by sign-mediation*. The consequence of this thinking on mediation is that all methodological approaches relying on the postulate of imme-

diacy (or on the “postulate of directness”, Leont’ev 1978, p. 47) are unable to explain the specific nature of human actions. This is also the reason why the theoretical analysis of the very nature of mediation is so important for Vygotsky. He clearly saw sign mediation as “the most important distinguishing characteristic of all higher mental functions” (Vygotsky 1999, p. 41), and believed that higher psychological functions had to be defined as “*a qualitatively new mental formation* that develops according to completely special laws and is subject to completely different patterns” compared with the lower ones (Vygotsky 1998, p. 34, emphasis added). The use of signs results in a completely new and specific structure of behaviour in man, a structure that breaks with the traditions of natural behaviour and creates new forms of cultural-psychological activity (Vygotsky 1999, p. 47).

Between 1932 and 1933 Vygotsky re-evaluated the concepts of meaning and sign. He stated in a seminar for his research group that the social nature of the sign was not understood correctly in the group’s earlier work.

“[Introduction: the importance of sign; its social meaning.] In older works we ignored that the sign has a meaning. — We proceeded from the principle of the constancy of meaning, we discounted meaning. — Whereas before our task was to demonstrate what ‘the knot’ and logical memory have in common, now our task is to demonstrate the difference that exists between them.” (Vygotsky 1997h, p. 134.)

There is no sign without meaning. “The formation of meaning is the main function of sign. Meaning is everywhere where there is a sign — *meaning* is inherent in the sign.” (Vygotsky 1997h, pp. 134, 136.) Here the focus of analysis moves from the sign as an instrument to the sign as a meaning container.

Including symbolic functions in psychological operations creates conditions for the connection of elements between the present and the future, which creates “a completely new psychological field for action”

(Vygotsky 1999, p. 35) that leads to the formation of intention and of a target action planned in advance. This new relation of action to personality, which arises from the word and leads to the mastery of action, is manifested in free action, controlled and directed by the word.

“If the act, independent of the word, stands at the beginning of development, then at its end stands the word becoming the act. The word, which makes the action of man free.” (Vygotsky 1999, pp. 67–68.)

According to Vygotsky, speech is the medium by which we learn to master our behaviour and which makes us free of the immediate influence (stimulus) of the environment. “The word subordinates motor reactions to itself; this is the source of *the power of the word over behaviour*.” (Vygotsky 1998, p. 169, emphasis added.)

Analysis of sign-meaning unity leads to the concept of word meaning, which then becomes a central category in *Thinking and Speech*. This, in turn, leads to the idea of the semantic and systemic nature of the mind. “Consciousness as a whole has a semantic structure”, which is why “semiotic analysis is the only adequate method for the study of the systemic and semantic structure of consciousness.” (Vygotsky 1997h, p. 137) Consequently, the method of cultural psychology “must be that of semantic analysis. Our method must rely on the analysis of the meaningful aspect of speech; it must be a method for studying verbal meaning.” (Vygotsky 1987, p. 47.)

Table 1 below (adapted from Silvonen 2007) summarises the results of the above analysis of the development of Vygotsky’s cultural-historical psychology and semiotic conceptions of the sign-speech system.

Table 1. The development of Vygotsky's theory of signs as semiotic mediators (CHP = cultural-historical psychology, EB = epistemological break).

	Socio-behaviourism		Early CHP		Late CHP
Explanatory concepts	Speech as a system of social reflexes	Mediated activity, EB one	Signs as instruments, psychological tools	Semiotic Mediation, EB 2?	Signs as meanings in human drama
Methodology of inquiry	Analytical-objective method		Instrumental method of double stimulation		Semiotic analysis of the systemic and semantic structure of consciousness.

Vygotsky's explanatory concepts move from a socio-behaviourist "speech-as-reflex" conception to the cultural-historical idea of mediated activity. This move represents a break with the old "classical" explanatory model, through which he paved the way for a new approach to the psyche of human beings. This could be conceptualised as a transition from classical to non-classical psychology (e.g., Asmolov 1998; El'konin 2001), or as a break with "modern" science. In Althusserian (1970; 1996) terms we could say that there was definitely an epistemological break between these two phases in Vygotsky's thinking.

Foucault, however, reminds us that the break did not happen at one single point of time. The socio-behaviourist phase could be understood as the beginning, as the positive discourse of consciousness, which transformed into the genuine theory of higher psychological functioning through several epistemological shifts and breaks. Because of his premature death Vygotsky never managed to move through the third and fourth Foucauldian thresholds. Vygotskian tradition was formalised in a very special historical context, which also determined the discursive rules for the formation of theoretical propositions and research questions that came after.

From Vygotsky to Leontyev – the CHAT concept

If we go back to the historical moments after Vygotsky's premature death it is easy to see the diverse ways in which his work was read even then. The obituaries written by Leontyev and Luria in 1934 are most telling in this respect.

Luria emphasises the speech-mediated, semiotic nature of higher psychological functions:

“Vygotsky analyzed the origin of such complex mental functions as logical memory, active attention, will, speech, thought; being one of the first psychologists in his country to introduce the ‘developmental’ method into the experimental study of these problems. His attention was drawn to the fact that speech plays the most important part in the development of complex behavior; *it is speech that creates new functions inter-connected through their meaning.*” (Luria 1935, p. 238, emphasis added.)

Leont'ev makes a move towards the activity approach, which would become his endeavour for the next few decades.

“Interpretation of the mediated structure of human psychological processes and mental phenomena in general *as human activity* was for Vygotsky the cornerstone, *the foundation, of the entire psychological theory he developed* - the theory of sociohistorical (‘cultural’ as opposed to ‘natural’) development of the human mind” (Leont'ev 1997, p. 43, emphasis added).

These statements could be read as different reactions to the conceptual framework (summarised above in Table 1) Vygotsky left behind. Both obituaries are intellectually brave, written at a time when scientific discussion in the Soviet Union was already under the control of the Communist Party. Ideological campaigns established special “regimes of truth”, which determined the possible space for intellectual discussion.

In order to understand this development we have to move from an internalist approach to an investigation that reveals how “the production of discourse is at once controlled, selected, organised and redistributed according to [a] certain number of procedures, whose role is to avert its powers and its dangers” (Foucault 1971, p. 8). We have to look at the discursive practices that characterised the move through the third and fourth thresholds in the formation of the cultural-historical school.

Discursive practices of truth production

Michel Foucault analysed the ways in which truth is produced in discursive practices that define the rules for possible “truths”, for statements that may have the function of “truth”. Discursive practices define which topics can be discussed and which ones have to be excluded.

“Discursive practices are characterized by the demarcation of a field of objects, by the definition of a legitimate perspective for a subject of knowledge, by the setting of norms for elaborating concepts and theories. Hence, each of them presupposes a play of prescriptions that govern exclusions and selections.” (Foucault 2000, p. 11.)

Foucault’s idea is that power is inherent in any knowledge. Knowledge is produced in power relations, which are defined in discursive practices, which in turn are reproduced in power-knowledge relations.

“We should admit rather that power produces knowledge — —; that power and knowledge directly imply one another; that there is no power relations without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations” (Foucault 1991c, p. 27).

Power is present in all knowledge, even if it is not questioned or analysed in the knowledge-creating process. Power was practiced in the Soviet Union in very special discursive ways.

The Soviet regime of truth

Marxism-Leninism became the official state philosophy in the 1930s, and every theory had to adapt itself within the framework of this ideology. Activity theory developed after Vygotsky's death in an atmosphere of strict ideological control, which also had consequences in terms of its conceptual structure. Vygotsky's group started its work in the enthusiastic atmosphere of the avant-garde of 1920s culture. However, new discursive rules were established in the 1930s, and all non-Marxist and Western sciences were subjected to serious criticism. Discipline after discipline had to have its Marxist slant, or at least to pay lip service. Psychology was no exception.

Talankin published the first attack on the cultural-historical approach 1931 in *Sovjetskaja Psihoneurologija*:

“The Vygotsky and Luria group is undoubtedly talented. But it represents the danger of positivism and of uncritical transfer of various Western European psychological theories that are especially fashionable now, especially those that are very influential in the West. In one period this was Freudianism; next came Gestalt psychology; then came cultural psychology, and, finally the current stemming from Karl Bühler. – – Nevertheless, their conception of cultural psychology must be opposed. It has not yet been subjected to criticism. It must be shown that a Marxist approach to the problem of the development of mental processes, on the basis of the history of labor, indeed differs radically from the approach to the problem we find in Vygotsky and Luria.” (Talankin 2000, pp. 10–11.)

Several other criticisms followed, and the Pedology Resolution of the Central Committee of the Communist Party in 1936 (On pedological... 1950) put an end to public cultural-historical theorising for decades. The influence of ideological pressure is evident in the letters Vygotsky and Leontyev exchanged. Vygotsky wrote an enthusiastic and optimistic letter to Leontyev in 1931, praising Luria's ethnographic work in Tashkent.

“The year's results are exceedingly lamentable, and the outlook for next year is exceedingly vague. The picture is relieved by the *extraordinary, unexpected, and quite fortunate* successes achieved by A.R. [Luria], who has accomplished more than we have this whole year.” (Vygotsky 2007, p. 43.)

Only a year later the situation had changed radically. The Communist Academy of Education was dissolved in 1932 and Vygotsky's group was in a trouble. Leontyev wrote to Vygotsky on the eve of his departure from Moscow and his move to Charkov.

“A huge number of questions of vital importance and immeasurable difficulty must be resolved tomorrow. It is clear to me: if knots cannot be untied, then in extreme cases they are cut. This is one of those extreme cases. And for this reason I will be cutting them. – – You yourself understand that now we, as a group of people bound by ideas, are undergoing a tremendous crisis. With such crises, internal conflicts are not resolved simply and without pain. In most cases they are resolved with a bullet.” (Leontiev 2005a, pp. 70–71.)

Bullets were never needed in the discussions between the members of the Vygotsky group. However, the ideological pressure on the members was enormous, and must have had some effect on their lives. There is an ongoing debate about a possible personal break between Vygotsky and Leontyev in this difficult situation (Leont'ev & Leont'ev 2000; Sokolova 2002). However, theoretical questions cannot be resolved on

an individual level. Whatever the personal issues were, Leontyev managed to develop his own Activity Theory within the given limits of Soviet discourse.

The discursive practice of Activity Theory

It seems to me that Leontyev consciously adopted a double strategy in order to face the challenges of the new situation in Soviet science after the authoritarian turn in discursive practice.

On the one hand he actively participated in the construction of Soviet socialism. He frequently contributed to major Soviet publications and encyclopaedias, citing Lenin and Stalin or praising the 1936 pedology resolution if necessary. It is difficult from where we stand to evaluate his real political attitude, how enthusiastic or tactical/cynical he was. However, through his political activity he managed to create a limited space for his group to continue its serious scientific work.

On the other hand Leontyev developed his own interpretation of the cultural-historical approach, continuing the theme of Vygotsky's early, instrumental theory and distancing himself from his late semiotic ideas.

In 1935 Leontyev published a paper that could be considered the first activity theoretical investigation. The activity principle emerges, to be formulated later as an alternative to Vygotsky's interpretation of mediation.

“— for a higher generalization, a concept, a child must have a system of psychological operations corresponding to this higher generalization, i.e., that a change in the child's consciousness sets in as a result of changes in his *intellectual activity, understood as a system of psychological operations defined by the child's actual relation to the reality underlying that system*, not vice versa. This is the general law of development of the mind in ontogeny.” (Leont'ev 1995, p. 38, emphasis added.)

This shows the theoretical emphasis in instrumental forms of mediation (see Table 2). The distinction between “the actual relationship to reality” and “derivative cultural reality” is now one of the keys to activity theory. Interaction between people, communication and cultural relations are only derivatives from material activity. With this distinction Leontyev and his group explicitly distanced themselves from Vygotsky’s original ideas: this is clearly stated in Zinchenko’s paper on questions of memory research.

“Indeed, one of the most basic of all problems, the conceptualization of the nature of mind, was incorrectly resolved. The central characteristic of the human mind was thought to be mastery of the natural or biological mind through the use of auxiliary psychological means. Vygotsky’s fundamental error is contained in this thesis, in which he misconstrued the Marxist conception of the historical and social determination of the human mind. Vygotsky understood the Marxist perspective idealistically. The conditioning of the human mind by social and historical factors was reduced to the influence of human culture on the individual. *The source of mental development was thought to be the interaction of the subject’s mind with a cultural, ideal reality rather than his actual relationship to reality.*” (Zinchenko 1984, pp. 66–67, emphasis added.)

Leontyev describes how he differed from Vygotsky as follows:

“Vygotsky’s proposition that consciousness is a product of the child’s verbal communication under conditions of his activity and in relation to the material reality that surrounds him must be turned around: the consciousness of a child is a product of his human activity in relation to objective reality, taking place under conditions of language and under conditions of verbal communication. — —

In this dialectic of the interplay of experience and activity, it is activity that guides. So, the influence of the external situation, just as the influence of the environment in general, is not determined each time by the environment itself, and not by the subject, taken in their abstract, external relation to one another, but also not in the experiencing of the subject, but rather specifically in the content of his activity. Consequently, it is in activity and not in social experience that the true unity of the subject and his reality, personality, and environment is realized.” (Leontiev 2005b, pp. 25–26.)

It is clear that Activity theory was an adaptation to the Soviet reality, but at the same time it was a unique interpretation of the nature of human activity, stemming from Vygotsky’s instrumental theory but taking distance from the semiotic understanding of the human psyche.

Vygotsky, Leontyev and the present

Activity Theory was a form in which scientific work was adapted to Soviet discursive practices. As a consequence, questions of power relations and semiotic mediation were totally excluded or put in a marginal position.

Does this make Activity Theory invalid or mentally empty? Of course it does not. It could rather be seen as an example of the Foucauldian “game of power” in practice.

The exclusion of power and communicative relations from the theoretical apparatus was the price the proponents of Activity Theory had to pay for its existence. In doing so they adapted the rules of Soviet discursive practices and became part of power games and the production of knowledge.

In my view, the cultural-historical tradition could be considered a network of theories promoting different research interests giving partly compatible, partly competing interpretations of the basic nature

of mediation. It has to be said that all research interests open up different *problematiques*. The concept of object-oriented activity, developed after Vygotsky in activity theory, is a good example. Object orientation brings to cultural-historical theory an element that was missing in Vygotsky's writings, and opens up new research directions. Interpretation of the concept of the object may be different within the mediational framework of analysis, however: it may be more instrumental or more semiotic. The debate between these interpretations is one of the basic components in the development of cultural-historical theory.

I perceive a really distinct semiotic phase in Vygotsky's thinking. However, his conception of sign mediation remains, in many respects, open to different interpretations. Thus Vygotsky could be considered the founder of discursivity in the Foucaultian sense of the word:

“Founders of discursivity are unique in that they are not just the authors of their own works. They have produced something else: the possibilities and the rules for the formation of other texts. They have established an endless possibility of discourse.”
(Foucault 1991b, p. 114.)

References

- Althusser, L. (1970). *Reading Capital*. London: New Left Books.
- Althusser, L. (1996). *Writing on Psychoanalysis* (O. C. Corpet & F. Matheron, Trans.). New York: Columbia University Press.
- Asmolov, A. (1998). *Vygotsky Today: On the Verge of Non-Classical Psychology*. Commack: Nova Science Publishers.
- Chaiklin, S. (Ed.). (2001). *The Theory and Practice of Cultural-Historical Psychology*. Aarhus: Aarhus University Press.
- Chaiklin, S. (2003). The Zone of Proximal Development in Vygotsky's Analysis of Learning and Instruction. In A. Kozulin, B. Gindis, V. S. Ageyev & S. M. Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 39–64). Cambridge: Cambridge University Press.
- Cole, M. (2005). Cultural-Historical Activity Theory in the Family of Socio-Cultural Approaches. *International Society for the Study of Behavioural Development. Newsletter*, 47 (1), 1–4.

- Cole, M. & Engeström, Y. (2007). Cultural-Historical Approaches to Designing for Development. In J. Valsiner & A. Rosa (Eds.), *The Cambridge Handbook of Sociocultural Psychology* (pp. 460–483). Cambridge, NY: Cambridge University Press
- Daniels, H., Cole, M. & Wertsch, J. V. (Eds.). (2007). *The Cambridge Companion to Vygotsky*. Cambridge: Cambridge University Press.
- Donald, M. (1991). *Origins of the Modern Mind. Three Stages in the Evolution of Culture and Cognition*. Cambridge, MA: Harvard University Press.
- El'konin, B. D. (2001). L. S. Vygotsky & D. B. El'konin. Symbolic Mediation and Joint Action. *Journal of Russian and East European Psychology*, 39 (4), 9–20.
- Engeström, Y. (2005). *Developmental Work Research. Expanding Activity Theory in Practice*. Berlin: Lehmanns.
- Foucault, M. (1971). Orders of Discourse. *Social Science Information*, 10 (2), 7–30.
- Foucault, M. (1991a). *The Archaeology of Knowledge* (A. M. Sheridan Smith, Trans.). London: Routledge.
- Foucault, M. (1991b). What Is an Author? In P. Rabinow (Ed.), *The Foucault Reader* (pp. 101–120). London: Penguin Books.
- Foucault, M. (1991c). *Discipline and Punish. The Birth of the Prison*. (Orig. 1975). London: Penguin Books
- Foucault, M. (2000). The Will to Knowledge. (Orig. 1970). In M. Foucault *Ethics. Subjectivity and Truth. Essential works of Foucault, 1954–1984*. Vol. 1 (pp. 11–16). Edited by Paul Rabinow. London: Penguin Books
- Holzkamp, K. (2006). *Wissenschaft als Handlung*. Schriften III. (Orig. work 1968). Hamburg: Argument.
- Keiler, P. (1999). *Feuerbach, Wjgotski & Co. Studien zur Grundlegung einer Psychologie des gesellschaftlichen Menschen*. Dritte, erweiterte Auflage. Hamburg: Argument.
- Keiler, P. (2002). *Lev Vygotskij – ein Leben für die Psychologie*. Weinheim: Beltz.
- Kozulin, A., Gindis, B., Ageyev, V. S., Miller, S. M. (Eds.). (2003). *Vygotsky's Educational Theory in Cultural Context*. Cambridge: Cambridge University Press
- Langford, P. E. (2005). *Vygotsky's Developmental and Educational Psychology*. Hove: Psychology Press.
- Leont'ev, A. N. (1978). *Activity, Consciousness, and Personality* (M. J. Hall, Trans.). Englewood Cliffs, NJ: Prentice Hall.
- Leont'ev, A. N. (1995). The Assimilation of Scientific Concepts by Schoolchildren. (Orig. 1935). *Journal of Russian and East European Psychology*, 33 (6), 12–38.
- Leont'ev, A. N. (1997). L. S. Vygotsky: In Memoriam. (Orig. 1934). *Journal of Russian and East European Psychology*, 35 (2), 42–47
- Leont'ev, A. A. & Leont'ev, D. A. (2000). Kommentar zum Manuskript von A. N. Leont'ev. In G. Rückriem (Ed.), *Leont'ev, Aleksej N. Frühschriften* (pp. 307–309). Berlin: ProBusiness.
- Leontiev, A. N. (2005a). Letter from A. N. Leontiev to L. S. Vygotsky [5.2.1932]. *Journal of Russian and East European Psychology*, 43 (3), 70–77.
- Leontiev, A.N. (2005b). Study of the Environment in the Pedological Works of L. S. Vygotsky. *Journal of Russian and East European Psychology*, 43 (4), 8–28.
- Luria, A. R. (1935). L. S. Vygotsky. *Character and Personality: an International Psychological Quarterly*, 3, 238–240.

- Luria, A. R., & Vygotsky, L. S. (1992). *Ape, Primitive Man and Child. Essays in the History of Behavior* (E. Rossiter, Trans.). New York: Harvester Wheatsheaf.
- On Pedological ... (1950). On Pedological Distortions in the Commissariats of Education. A Resolution of the Central Committee of the Communist Party of the Soviet Union July 4, 1936. In Wortis, J. *Soviet Psychiatry* (pp. 242–245). Baltimore: The Williams and Wilkins Company.
- Silvonen, J. (2007). Huomioita Vygotskin semiotiikasta. [Finnish] In H. Veivo (Ed.), *Vas-tarintal/Resistanssi*. (pp. 185–197). Helsinki: Yliopistopaino.
- Sokolova, E. E. (2002). The Relationship between Vygotsky's and Leont'yev's Research Traditions as Revealed Through an Analysis of Leont'ev's Early Works. In D. Robbins & A. Stetsenko (Eds.), *Voices within Vygotsky's Non-Classical Psychology* (pp. 63–76). New York: Nova Science.
- Stetsenko, A. (2003). BOOK REVIEW: "Alexander Luria and the Cultural-Historical Activity Theory: Pieces for the History of An Outstanding Collaborative Project in Psychology" Mind, *Culture and Activity*, 10 (1), 93–97.
- Talankin, A. A. (2000). On the Vygotsky and Luria Group. (Orig. 1931). *Journal of Russian and East European Psychology*, 38 (6), 10–11.
- Valsiner, J. & Rosa, A. (Eds.). (2007). *The Cambridge Handbook of Sociocultural Psychology*. Cambridge, NY: Cambridge University Press.
- Veer, R. van der (2007). *Lev Vygotsky*. London: Continuum.
- Vygotski, L. S. (1929). The Problem of the Cultural Development of Child. *The Pedagogical Seminary and Journal of Genetic Psychology*, 36 (3), 415–432.
- Vygotsky, L. S. (1971). *The Psychology of Art*. (Orig. 1925/1965). Cambridge: The M.I.T. Press.
- Vygotsky, L. S. (1987). Thinking and Speech (N. Minick, Trans.). (Orig. 1934). In R. W. Rieber & A. S. Carton (Eds.), *The Collected Works of L. S. Vygotsky. Vol 1: Problems of General Psychology* (pp. 37–285). New York: Plenum Press.
- Vygotsky, L. S. (1989). Concrete Human Psychology. (Orig. 1929) *Soviet Psychology*, 27(2), 53–77.
- Vygotsky, L. S. (1994). The problem of the environment. (Orig. 1935). In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky Reader* (pp. 338–354). Oxford: Blackwell.
- Vygotsky, L. S. (1997a). *Educational Psychology* (R. Silverman, Trans.). (Orig. 1926). Boca Raton: St. Lucie Press.
- Vygotsky, L. S. (1997b). Consciousness as a Problem for the Psychology of Behavior. (Orig. 1925). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky. Vol. 3: Problems of the Theory and History of Psychology* (pp. 63–79). New York: Plenum Press.
- Vygotsky, L. S. (1997c). The Historical Meaning of the Crisis in Psychology: A Methodological Investigation. (Orig. 1927). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky. Vol 3: Problems of the Theory and History of Psychology* (pp. 233–343). New York: Plenum Press.
- Vygotsky, L. S. (1997d). The Instrumental Method in Psychology (R. van der Veer, Trans.). (Orig. 1930). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky. Vol. 3: Problems of the Theory and History of Psychology* (pp. 85–90). New York: Plenum Press.
- Vygotsky, L. S. (1997e). The Methods of Reflexological and Psychological Investigations. (Orig. 1926). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky*.

- Vol. 3: Problems of the Theory and History of Psychology* (pp. 35–49). New York: Plenum Press.
- Vygotsky, L. S. (1997f). On Psychological Systems (R. van der Veer, Trans.). (Orig. 1930). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky. Vol. 3: Problems of the Theory and History of Psychology* (pp. 91–108). New York: Plenum Press.
- Vygotsky, L. S. (1997g). Preface to Thorndike. (Orig. 1926). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky. Vol. 3: Problems of the Theory and History of Psychology* (pp. 147–161). New York: Plenum Press.
- Vygotsky, L. S. (1997h). The Problem of Consciousness. (Orig. 1933). In R. W. Rieber & J. Wollock (Eds.), *The Collected Works of L. S. Vygotsky. Vol. 3: Problems of the Theory and History of Psychology* (pp. 129–138). New York: Plenum Press.
- Vygotsky, L. S. (1998). Pedology of the Adolescent. (Orig. 1930–31). In R. W. Rieber (Ed.), *The Collected Works of L. S. Vygotsky. Vol. 5: Child Psychology* (pp. 3–184). New York: Plenum Press.
- Vygotsky, L. S. (1999). Tool and Sign in the Development of the Child (M. J. Hall, Trans.). (Orig. 1930). In R. W. Rieber (Ed.), *The Collected Works of L. S. Vygotsky. Vol. 6: Scientific Legacy* (pp. 1–68). New York: Plenum Press.
- Vygotsky, L.S. (2007). Letters to Students and Colleagues [1926–1934]. *Journal of Russian and East European Psychology*, 45 (2), 15–60.
- Wertsch, J. V. & Del Río, P. & Alvarez, A. (Eds.). (1995). *Sociocultural Studies of Mind*. Cambridge: Cambridge University Press.
- Zinchenko, P. I. (1984). The Problem of Involuntary Memory. (Orig. 1939). *Soviet Psychology*, 22 (2), 55–111.