

RETHINKING THE EARLY HISTORY OF POST-VYGOTSKIAN PSYCHOLOGY: The Case of the Kharkov School

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Between the death of Vygotsky in 1934 and the discovery of Vygotsky's work in the West in 1962, Vygotskian psychology was developed through research done by the first generation of Vygotsky's students and their followers, primarily associated with the Kharkov School. Surprisingly, these studies carried out in the 1930s, of great importance for the development of virtually all subsequent Vygotskian psychology, still remain largely unknown; this represents a significant gap in understanding the history of Vygotskian psychology as an empirical study of consciousness. This paper provides a systematic overview of the research agenda of the Kharkov group between 1931 and 1941 and provides new insights into the early development of Vygotskian psychology.

Keywords: Soviet psychology, Vygotsky, Kharkov School, cultural-historical theory, activity theory

The Kharkov School of Psychology: A Brief History

The *Kharkov School of Psychology* is one of the most mysterious and intriguing in the history of world psychology. The school consisted of a group of Lev Vygotsky's students who left Moscow during his lifetime to set up a research center at the newly established *Ukrainian Psychoneurological Academy* in Kharkov, capital of the Soviet Ukraine from 1919 through 1934 (Cole, 1980; Ivanova, 2002; A. A. Leontiev, 2005; A. A. Leontiev, Leontiev, & Sokolova, 2005; A. N. Leontiev, 1986; Sereda, 1994; Valsiner, 1988; V. P. Zinchenko & Morgunov, 1994).

The importance of the work done by the members of the Kharkov school can hardly be overestimated: their studies were instrumental in making Vygotsky's psychology one of the leading psychological schools in the world today.¹

According to Valsiner (1988),

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This work was partially supported by a grant from the Canadian Institute of Ukrainian Studies (CIUS) Exchanges with Ukraine Endowment Fund of the University of Alberta, Canada.

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¹ Kozulin (1990), for example, writes, "The work of the Kharkov school of developmental psychology was foundational for the future development of Soviet psychology." Many of the ideas and the concepts formulated in Kharkov became characteristic features of Soviet developmental theory in the 1960s.

“The thinking of the group of young psychologists in Kharkov in the 1930s, even if it did not result in a substantial number of publications during that decade, had nevertheless very substantial implications for the further development of Soviet research on cognitive development . . . The importance of the “Kharkov school” to developmental research in the USSR is fundamental. The major theoretical traditions in the “Moscow schools” of Soviet developmental psychology of the 1960s and 1970s are, to a greater or lesser degree, outgrowths from the activities of the ‘Kharkov school.’”

The Kharkov School of psychology is perhaps most frequently remembered today in the context of the history of Leontiev’s *Activity Theory* and its relation to the psychology of Vygotsky (Kozulin, 1990; Van der Veer & Valsiner, 1991) or the later development of “independent” theories by group members: like Galperin’s theory of stepwise formation of mental actions (Haenen, 1996; Shchedrovitskii, 1980/2004), Elkonin’s psychology of play (Elkonin, 1978/2005), P. Zinchenko’s studies of involuntary memory (Laktionov & Sereda, 1993; Mesheryakov, 2003, in print; Sereda, 1984, 1984/1994), Zaporozhets’ psychology of action (Dubovis & Khomenko, 1985; Venger, 1985; V. P. Zinchenko, 1995), and work on early childhood development (Elkonin, 1969/1995; Zaporozhets, Zinchenko, & Elkonin, 1964, 1964/1971). There also several accounts of the psychology of the Kharkov school itself, however, these analyses are typically very short and limited in scope and depth of analysis (Cole, 1977, 1980; Ivanova, 2002; Sereda, 1994; Valsiner, 1988). Most of the sources on the history of the Kharkov school are in Russian and have never been translated.

Michael Cole (1980) may have been the first to introduce the Kharkov school to English readers in his *Introduction* to a special issue of *Soviet Psychology* that featured a number of the works originally published in Ukrainian in 1941.² Cole provides a “crude sketch of the Kharkov school’s overall theory of development” along with the historical and cultural background of this school. More recently, the intellectual history of the Kharkov school has been covered in a greater detail in a number of studies on the history of the Soviet psychology. Before considering these, let us first present an overview of the people involved in the school.

The Kharkov School of Psychology: An Overview

The history of the Kharkov school of psychology begins in late 1931 or early 1932, when a group of young psychologists from among Vygotsky’s closest Moscow disciples (A. N. Leontiev, A. V. Zaporozhets, L. I. Bozhovich, and T. O. Ginevskaya) left for Kharkov, in the Ukraine, to continue cultural-historical psychological research under the leadership of A. N. Leontiev. This initial group was soon joined by several local researchers, among them, P. Ya. Galperin, P. I. Zinchenko, V. I. Asnin, G. D. Lukov, and K. E. Khomenko.³ This expanded group developed a series of studies, based at a number of educational and research

² These works included: Asnin (1941b/1980), Bozhovich and Zinchenko (1941/1980), Galperin (1941/1980), Khomenko (1941a/1980), Zaporozhets (1941b/1980), and Zaporozhets & Lukov (1941/1980).

³ The list of the members of Kharkov school in the 1930s, besides those mentioned above, includes: D. M. Aranovskaya-Dubovis, F. V. Bassin, I. G. Dimanshtein, E. V. Gordon, O. M. Kontsevaya, L. I. Kotlyarova, G. V. Mazurenko, V. V. Mistyuk, A. I. Rozenblyum, N. N.

institutions in the city. In October 1935, Leontiev left Kharkov for Moscow. Zaporozhets took over as the Head of psychological department of the *Kharkov State Pedagogical Institute* that would later become the main research center of the school.

The Kharkov school was not, as some say, a “merely geographical denomination” (Repkin, 1998). There was a Kharkov school in the strictest sense of the group of researchers working and living exclusively in Kharkov. However, the main problem with such a definition of the Kharkov School is that its initiator and the leader A. N. Leontiev, left Kharkov for Moscow (and later Leningrad) as early as 1935; by the second half of the 1930s Leontiev would frequently commute between Moscow, Kharkov, and Leningrad, where a number of his students and collaborators were working. Although he never lost contact with his Kharkov colleagues and collaborators, by strict definition, his “Kharkov period” proper finished sometime around 1935 to 1936. On the other hand, Leningrad-based Daniil Elkonin worked in close collaboration with the Kharkov group researchers (Lukov, Leontiev, Zaporozhets), visited Kharkov to meet with them, and even identified himself as a group member.⁴

Thus, the Kharkov group was the hub of a group of scholars a number of the scholars working in different Soviet cities. For instance: Bozhovich soon moved to the Ukrainian town of Poltava; D. B. Elkonin, and F. I. Fradkina lived and worked in Leningrad (Elkonin, 1978/2005); and A. I. Rozenblyum along with Leontiev and Bozhovich conducted studies in Moscow (A. N. Leontiev, 1986; A. N. Leontiev & Rozenblyum, 1935). All these people were also connected to non-Kharkov scholars conducting research in Vygotskian tradition during this period; for instance, the studies conducted by Vygotsky students and collaborators like N. G. Morozova, L. I. Slavina, R. E. Levina. Zh. Shif, B. V. Zeigarnik, whose ideas developed within essentially the same framework of psychological research as initiated by Vygotsky and his associates.⁵ From the perspective of the history of idea development, it seems more appropriate to consider this broader group of Vygotsky’s students, the core of which were members of the Kharkov school in the 1930s. This extended group represented a Vygotskian orientation in psychology in the 1930s, and actually founded the Vygotskian tradition in psychology after Vygotsky’s untimely death in 1934.

The history of this period of the Kharkov school ends abruptly in the summer of 1941 when war broke out between Nazi Germany and the Soviet Union. In the

Solomakha, and T. I. Titarenko (A. A. Leontiev et al., 2005). According to A. N. Leontiev’s (1999) autobiography, the Kharkov group in the 1936 to 1937 included 15 to 16 researchers.

⁴ For example, Elkonin wrote that “After Vygotsky’s death in 1934, I became very closely involved with a research group of his colleagues and students conducting these investigations under the leadership of A. N. Leontiev in Kharkov. In early 1936, at the psychology department of the Kharkov Pedagogic Institute, I presented to this group the first experimental facts and theoretical views on play that had been developed by the Leningrad group of psychologists under my general direction” (Elkonin, 1978, 1978/2005).

⁵ For instance, it is interesting and quite illustrative of the distributed character of scientific inquiry among the Vygotsky’s students that what we now know as Galperin’s famous of theory of the stepwise formation of mental actions was in fact developed independently and in parallel both by Galperin himself (top-down) and by Vygotsky’s former student Slavina (bottom-up), who followed an essentially similar logic of scientific inquiry from very different perspectives (Chudnovskii, 1998; Shchedrovitskii, 1980/2004).

postwar period, research resumed in both Kharkov and Moscow and the early studies done in the 1930s became instrumental in the major avenues of psychological research developed in Vygotskian tradition starting in the 1955 and still continuing today. For example, we find studies on the psychology of memory (P. I. Zinchenko), movement, perception (Zaporozhets, Leontiev, V. P. Zinchenko), emotional development (Zaporozhets, Bozhovich), personality (Bozhovich), play (Elkonin) and learning (Elkonin & Davydov). We also find the theory of stepwise formation of mental actions (Galperin, Slavina, Talyzina), as well as integral theories of the psychology of activity (Leontiev) and action (Zaporozhets). The most essential characteristic of these seemingly different and independent research programs by Vygotsky's former students that make them extensions of Vygotskian psychology are the interrelatedness of their research problems and their methods of scientific inquiry: By then, however, several members of the group had moved to Moscow.⁶

The Significance of the Kharkov School

Two disputable themes are worth mentioning that frequently come up in discussing the development of the Kharkov school: the *Kharkovites* separation from Vygotsky, and the role of the Kharkov school in developing Leontiev's psychological school.

Kharkov school versus Vygotsky? Perhaps the most frequent reference to the Kharkov school found in contemporary academic discourse is in the context of discussing the further "life of ideas" of Vygotsky's work (Kozulin, 1990). In this context, the Kharkov school is frequently criticized for their separation from Vygotsky and even distortion of his original ideas.⁷

Kozulin's analysis of the interrelationships between Vygotsky's theory and the contribution of the Kharkov school claims that the further development of Vygotsky's original thoughts by his students revealed important lacunae in his theory. Kozulin stresses that Vygotsky's students in Kharkov "developed Vygotsky's theory but also abandoned some of his initial ideas. . . . The demarcation between Vygotsky's legacy and the theoretical ideas of the Kharkov school occurred in the evaluation of the role of external actions in the formation of mental functions" (Kozulin, 1984). According to this view, Vygotsky's cultural-historical theory emphasized cultural mediation as the mechanism of human development, and allowed for three large classes of mediators: signs and symbols, individual object-directed activity, and interpersonal relations. Whereas the main thrust of Vygotskian research in the first half of the 1930s investigated the first

⁶ In fact, the history of the Kharkov school "migrations" after the war is a bit more complicated than that. Several researchers moved to Moscow where they received tenure in the Department of Psychology of Moscow State University and in other research institutions (Galperin, Zaporozhets, Ginevskaya, and Bozhovich), Lukov left Kharkov for Leningrad, Elkonin left Leningrad for Moscow, while others remained in Kharkov working mainly in the Kharkov State Pedagogical Institute and the Kharkov Institute of Foreign Languages.

⁷ Thus, for instance, Jaan Valsiner points out that the "Kharkov school publicly declared themselves separate from the Vygotskian tradition" (Valsiner, 1988). Alex Kozulin (1990) likewise describes the attitude of the *Kharkovites* to the scientific legacy of their teacher in terms of the "ambivalent attitude of the Kharkov group toward Vygotsky's theory," their "rejection of the ideas of their teacher," their disagreement with Vygotsky and "deviation from his research program."

kind of mediation (i.e., the mediational role of signs and symbols) the Kharkov group focused their research on individual activities. The role and place of both symbolic psychological tools and interpersonal communication in human development were supposedly downplayed and underrepresented in the research agenda of the Kharkov school (Kozulin, 1990). P. Zinchenko's critique of Vygotsky, published in his 1939 paper on the mechanisms of remembering (P. I. Zinchenko, 1939a, 1939a/1983), is commonly referred to in this context as clear evidence, and even as a manifesto, of the formal separation of the Kharkov school from Vygotsky's theory.⁸

Kharkov leadership and Leontiev's activity theory. The scientific contribution of the Kharkov group is also frequently discussed in the context of the development of Leontiev's activity theory. The tendency to refer to the Kharkov group as "Leontiev's school" is apparent in academic psychological and educational publications in Russia and worldwide (Sokolova, 2001; Voiskunskii, Zhdan, & Tikhomirov, 1999). These studies view the development of Vygotskian psychology through the lens of what became to be known as "Leontiev's activity theory." The leading role of Leontiev in the interpretation and subsequent development of Vygotsky's psychology is invariably emphasized. Careful consideration of the historical evidence, however, shows that the story is not so simple. In his article about the creative path of his father, A. A. Leontiev (A. N. Leontiev's son, and a world-known psycholinguist and historian of psychology), remarks that although A. N. Leontiev was undoubtedly the leader of the Kharkov group—leadership recognized and acknowledged by all his colleagues—the framework of the Kharkov school research "was created by a collective mind" (A. A. Leontiev, 1983)⁹ that continued the work of Vygotsky. Indeed, studies by A. A. Leontiev, D. A. Leontiev, V. Davydov, L. Radzikhovskii, V. Zinchenko, B. Mescheryakov, and others, emphasize the continuity between the line of research initiated by Vygotsky, Luria, and Leontiev, and the ones developed by their students and followers. But typically, researchers analyze either the Vygotskian roots of activity theory in psychology (Davydov & Radzikhovskii, 1980/1985; A. N. Leontiev, 1967, 1967/1983; Sokolova, 2001) or the cultural–historical component of studies officially done within the activity theory research program (Mescheryakov, 2003; V. P. Zinchenko, 2001; V. P. Zinchenko & Veresov, 2002).¹⁰

⁸ For instance, Kozulin (1990) qualifies P. I. Zinchenko's 1939 article as a "full-scale critique of Vygotsky's theory as such."

⁹ Later on A. A. Leontiev (2005) expands on this: "Overall, what was Leontiev's personal role in the works of the Kharkov group? Let us begin by saying that he was continuously in Kharkov only until the end of 1934 and beginning of 1935, after which he returned to Moscow, and spent time in Kharkov only occasionally. . . . And even after that he remained, as they say in social psychology, both the "instrumental" and "experimental" leader of the group. It is he [Leontiev] who provided the methodological and theoretical basis for all of the experimental work of the Kharkovites. This takes nothing away from the roles played by the other members of the group, for instance, Zaporozhets or P. I. Zinchenko. "Kharkov psychology" was created through a *collective effort*, but Leontiev was always at the center of the Kharkovites' activities. All of them recognized this and pointed to it in their (unfortunately, not at all numerous) publications."

¹⁰ Interestingly, with respect to P. I. Zinchenko's (1939a/1983) notorious critique of Vygotsky, V. P. Zinchenko (2001) argues that "for those times this criticism was still mild compared with the unreigned criticism, the denunciatory articles, written about Vygotsky even while he was still alive," whereas B. Mescheryakov in his contextual analysis of the text demonstrates that what has always been

Other scholars emphasize the leading role of Zaporozhets in Kharkov psychology in the second half of the 1930s. Zaporozhets started collaborative research with Leontiev on the origin and genesis of the psyche in phylogeny (see Venger, 1985), and soon launched an independent research program that developed under his guidance at the Department of psychology of the *Kharkov State Pedagogical Institute*. Generally, Leontiev's role in research done in Kharkov is somewhat exaggerated—particularly after his departure to Moscow; after Leontiev's return to Moscow, Zaporozhets acted as the real leader of the school. It was Zaporozhets who coordinated the various research projects conducted in a number of organizations in Kharkov at that time, and “cemented” the school as a research unit (V. P. Zinchenko, 2003a).

Leontiev's intellectual leadership in the group is also questionable when considering the history of Galperin's theory of stepwise formation of mental actions, formulated in the 1950s on the basis of his original theoretical research. Likewise, consider the empirical and applied studies by Slavina (yet another member of the original “group of five” of Vygotsky's students) (Shchedrovitskii, 1980/2004). It is interesting to analyze the instances of disagreement among former participants of the Kharkov school that may have originated in the Kharkov period (Shchedrovitskii, 1980/2004). There was, for instance, a certain tension between Leontiev's and Bozhovich's views on affective and motivational aspects of human consciousness and on methods of empirical research of associated problems.¹¹ Consider, too, the famous unofficial debate on the prospective development of activity theory between such major figures of the Kharkov group as Leontiev, Luria, Zaporozhets, Galperin, and Elkonin that occurred in Luria's Moscow apartment in 1969, some 30 years later, when each of the participants had by then already founded their own research program and led a prominent research school in psychology.¹² That discussion, first published comparatively recently (in 1990) reveals substantial disagreements among the group of founders and the main proponents of psychological activity theory that apparently date

construed as “attack of Vygotsky's theory” (Kozulin, 1990) was in fact the apology of the author who had at that time been banned for several years already (Mescheryakov, 2003, in print).

¹¹ For example, quite characteristic of the main line of critique of Leontiev are remarkable critical remarks made by Bozhovich—perhaps the only one of Vygotsky's students (and the former member of the Kharkov school) who expressed explicit and public criticism of Leontiev's theory—about Leontiev's studies of needs and motivation. Bozhovich remarks that although the “experimental study of needs and motives was initiated in the national psychology by A. N. Leontiev and his students (L. I. Bozhovich, A. V. Zaporozhets, and others) in the 1930s, the research was carried out in Kharkov with later studies continued in Moscow.” As to the critique of Leontiev's theory, Bozhovich remarks sarcastically that “Generally, in Leontiev's theory, as well as in the work of many other psychologists, the analysis of the proper psychological process of needs development as a transition into qualitatively new forms appeared to be beyond the scope of psychological research. This problem is one he [Leontiev] attempts on an abstract-theoretical plane, making use of *istmat* [i.e. historical materialism] whenever he does not have concrete empirical data. This is understandable since in this field the experimental data which he could build upon are very scarce.” And further, “Leontiev's failure to find the ingenious solution of the psychological problem of needs development, in my opinion, resulted in his inability to find the correct solution yet another central problem of psychology—the problem of the interrelation of affect and consciousness” (Bozhovich, 1972/1997).

¹² V. P. Zinchenko, the son of P. I. Zinchenko, and already a well-known psychologist at that time took part in the meeting, too.

back to the early history of their collaborative research (Elkonin, 1969/1995; Galperin, 1969/1995; A. N. Leontiev, 1969/1995; Zaporozhets, 1969/1995; V. P. Zinchenko, 1969/1995).

A more balanced view of the issue of intellectual leadership in the Kharkov group, we suggest, is to regard the Kharkov school as a group of researchers with highly distributed ‘collective intelligence’; the group was essentially self-organizing and self-controlled rather than dominated by a single strong personality.¹³ What characterizes the group as a whole are their shared vision of the overall goals and methods of psychological research, based on their distinctly Vygotskian framework. We see this clearly in Leontiev’s own overview of the empirical research done at the Kharkov School.¹⁴

Empirical Studies of the Kharkov School

Valsiner (1988) points out that the “general credo of the “Kharkov school”” is to study the developmental conditions under which cognitive development takes place. There are three types of developmental conditions: (1) conditions related to the child’s actions with physical objects; (2) conditions related to the child’s interaction with peers—particularly adults; and, (3) reflexive and metacognitive practices as a factor in human development. Valsiner (1988) argues that all three types were investigated by researchers at the Kharkov school. As an example of the first type of study, Valsiner discusses Zaporozhets and Lukov’s Piagetian study of children’s ability to explain floating objects and associated physical phenomena (Zaporozhets & Lukov, 1941, 1941/1980, 1941/2002). As an example of the second sort of study of developmental

¹³ Discussing “Leontiev’s school,” V. P. Zinchenko (1993) remarks that he “not quite legitimately regards it [the school] as a single unit.” The reason being that “Galperin, P. I. Zinchenko, Zaporozhets, Luria, and Elkonin have each founded a new psychological field and their own scientific schools within the borders (or, perhaps, beyond the borders?) of psychological activity theory.” These theories are quite infrequently identified with activity theory, or rather, activity approach, in the West. In fact, continues Zinchenko, “in spite of considerable divergence of their scientific interests they quite *situationally* yet voluntarily accepted certain cultural psychological code, namely, the self-attribution as the school of L. S. Vygotsky—A. N. Leontiev—A. R. Luria. Nevertheless, they all certainly understood that there were at least two scientific paradigms behind this code: cultural-scientific psychology and psychology of activity. And each of them was sequentially or simultaneously working in both. I suspect that it was the very diversity of their talents and interests plus the extraordinary diplomatic and organizational skills of A. N. Leontiev that cemented this complex scientific organism, providing its stability the entire time starting from the Kharkov [period] and up to the first decade of the existence of the Psychology department at Moscow State University (i.e., until Leontiev’s death in 1979). Not only cemented it, but also attracted new researchers. It was also a school in the sense that there were no average ones among them. They all had different roles within the school. . .” (V. P. Zinchenko, 1993).

¹⁴ Equally illustrative is Elkonin’s description of a stream in Vygotskian school research in the 1930s, namely, that presented in his *Psychology of Play*: “A very important characteristic of the investigations . . . performed by the psychologists who were disciples of Vygotsky was that they were not directed by a single will and single mind, nor did we all work in a single organizational center and thus they did not develop within a particularly logical sequence in which the gaps in our knowledge disappeared one by one in the unknown area of children’s play. Nevertheless, this was a group effort united by the common theoretical principles Vygotsky outlined and each of these made their contribution to the further development of the area. Of course, because of the fragmentation, not all of the problems were covered by their theoretical and experimental research and many gaps still remain” (Elkonin, 1978/2005).

conditions, consider Zaporozhets' study—borrowed from Gestalt psychology experimentation—of children with impaired hearing and articulation acting under task conditions that involved using a lever to get an object (Zaporozhets, 1936, 1939, 1939/1986). Examples of the third type of study of conditions, in which children's own budding ability to reflect on their own actions and thinking provides a condition for further development, are Asnin's study of knowledge transfer (Asnin, 1941b, 1941b/1980), including his discussion of reliability in psychological experiments (Asnin, 1941a, 1941a/1981). Likewise, Khomenko's study of visual-imagic thought (Khomenko, 1941a/1980, 1941b), children's use of metaphors (Khomenko, 1941c), and Bozhovich and Zinchenko's study of children's acquisition of school knowledge (Bozhovich & Zinchenko, 1941, 1941/1980), among others.

The Kharkov Research Programme. Some important early synthetic assessments of the work of the Kharkov School have been written. In particular, A. A. Leontiev (1983) discusses two streams of research that were developed in Vygotsky's later work of the early 1930s. The first was the investigation of problem of the interrelation between speech (communication) and object-directed action. The second was a cycle of studies on the internal structure of meaning, its development, and the role of meaning in the forming and functioning of consciousness. The first was developed by Vygotsky and his associates in his studies of concept formation, and on the developing psychological structure of meaning and generalization. According to A. A. Leontiev, the second was announced, but was never developed by Vygotsky himself. However, in the 1930s, the systematic analysis of the problem of "practical activity and consciousness" became the main avenue of the research in the Kharkov school (A. A. Leontiev, 1983).

The only relatively extensive overview and periodization of the Kharkov school research agenda development available to date we owe to telegraphic notes from the archives of A. N. Leontiev reportedly drafted around 1940 to 1941 and first published by his son, A. A. Leontiev in 1988 as *Materials on consciousness* (A. N. Leontiev, 1940-41/1994). A. N. Leontiev's (1940-41/1994) *Materials on consciousness* is an important document on the history of Kharkov school, in that it provides a coherent and detailed account of the research of the Kharkov school and a periodization of its history. This paper was itself discussed in a series of papers mostly published over the last decade of historiographical research (Ivanova, 2002; A. A. Leontiev, 1983, 2005; A. A. Leontiev et al., 2005; Sokolova, 2001).¹⁵ But, like other recently published Leontiev's archival material from that time (A. N. Leontiev, 1933/1994, 1938), this document was never prepared for publication by its author. In fact, the paper is a series of personal notes that Leontiev made for himself and it is not clear if he was ever

¹⁵ A detailed thematic overview of the main research topics and problems of the school is also provided by V. P. Zinchenko in more recent work on the Kharkov school (V. P. Zinchenko, 2003b). According to V. Zinchenko, the main lines of Kharkov school research are: (1) the simplest tool-mediated actions of the child (Galperin); (2) sensory actions, including sensitivity to the skin colour of a human palm (Asnin, Zaporozhets, Leontiev); (3) motor skills, including those formed unconsciously (Asnin); (4) mental actions formed in the context of visual-operational (visual-motor) and logical (discursive) thinking (Asnin, Zaporozhets, Khomenko); (5) image formation under conditions of active and passive perception (Ginevskaya, Kotlyarova); (6) mnemonic actions under the conditions of voluntary and involuntary remembering (Zinchenko); (7) the genesis of children's aesthetic perception (Aranovskaya, Zaporozhets, Khomenko); (8) language awareness during pre-schoolers' play (Lukov); and (9) the development of conceptual thinking in children (Kontsevaya).

going to publish them in any format. The text is very sketchy and fragmentary, with numerous abbreviations, corrections and idea-revisions. Different parts on the text seem to have been written on different occasions over a considerable period of time.

Leontiev's paper can be divided into two parts, the first a "theoretical" perspective on the problem of consciousness in psychological research, the other an overview of a series of empirical studies along the lines formulated in the first part. The second part is in fact a general overview of the Kharkov school research done over the period from 1932 and up to "after 1936" (in his *Materials* Leontiev did not indicate the end of the period observed).

In the first part, Leontiev discusses the problem of consciousness in psychology and calls it the main object of psychology as a science, just as it was for his teacher, Vygotsky, throughout his entire career in psychology.

"Since consciousness is the main, distinct form of the human psyche," – writes Leontiev, - "therefore, the psychology of a man is necessarily a concrete science about consciousness . . . Psychology must develop psychological *theory* of consciousness. . . . This task is the most important—*decisive* for the whole future of psychological research. Unless this problem is resolved, psychology cannot claim to be a genuine science and cannot abandon the prehistorical path of its development to enter the broad road of its *history*" (A. N. Leontiev, 1940-41/1994).

In the second part, Leontiev identifies four cycles of the Kharkov group's research from 1932 onward. The first two cycles are the most thoroughly documented periods—roughly six pages in the 1994 publication of Leontiev's *Materials*.¹⁶ In contrast, the second two cycles (starting in 1935 onward) are only very briefly overviewed in about half a page. A. A. Leontiev (2005) provides a succinct overview of this periodization, faithful to the original. In addition, we used Leontiev's periodization of the school history presented in his *Materials on consciousness* (A. N. Leontiev, 1940-41/1994) and its analysis is presented in a number of recent papers (Ivanova, 2002; A. A. Leontiev, 1983, 2005; A. A. Leontiev et al., 2005; Sokolova, 2001).¹⁷

The first cycle of research (1932–33) touched on the "image-process" problem. Here we find studies of the relationship between speech and practical intellect (Bozhovich, 1935b, 1935b/2006), discursive thought and the development of meaning in the preschooler (Zaporozhets, Bozhovich), and concept mastery during studying (A. N. Leontiev, 1935a, 1935a/1983, 1935a/1995). The first experiments by P. I. Zinchenko on forgetting (P. I. Zinchenko, 1937, 1939b), and the design by Zaporozhets of the problem "perception as action" also belong to this period. The result of this cycle was, first, a new understanding that transfer is not only an indicator, but also a mechanism, of concept formation through communication. In addition, two different kinds of transfer were proposed that correspond to two different levels of communication, namely, applying a practical action in a situation and as a discursive process.

¹⁶ Another important source on the first cycle of research is the *Talk with Vygotsky* on October 12, 1933, also an archival document from Leontiev's notebooks (A. N. Leontiev, 1933/1994).

¹⁷ It is highly regrettable that several mistakes are found in the English translation of A. N. Leontiev's periodization of the history of the Kharkov school. In particular, the mistaken substitution of the name of the Kharkov school researcher V. I. Asnin by the name of V. I. Lenin in the recently published article by Aleksei A. Leontiev (2005).

The second cycle of research (1934–35) aimed to bring the processes being studied “outside,” and follow them in external activity. Here the main problems involve tools as objects for which a socially developed use is established. The tool is distinguished from the means to an end (i.e., as subordinate to “natural psychology”). This period featured the studies of Galperin (Galperin, 1936, 1936/1980), and the work of Zinchenko and Asnin, as well as that of Zaporozhets (1936, 1939, 1939/1986) and Bozhovich. The conclusion of these studies was that “to master a tool—as to master a meaning—means to master a process, an operation. It makes no difference whether this takes place in communication or in “invention” (A. N. Leontiev, 1940-41/1994).

The main idea of the third cycle of research (1935–36) is that: “The key to the morphology of consciousness lies in the morphology of activity.” Here we find reference to the work of Asnin, Ginevskaia, Mistiuk, Khomenko, and others, but primarily to G. D. Lukov, who experimentally demonstrated the interrelations of theoretical and practical activity by studying consciousness during play (Lukov, 1937, 1939). The research of Asnin (1941b, 1941b/1980) and P. I. Zinchenko (1937) develops the idea of the structure of activity.

The fourth cycle of research (1936–41) is based on the premise that, “all internal processes are built according to a model of external activity, and they have the same structure.” A multitude of studies are mentioned, first among them P. I. Zinchenko’s (1939a, 1939a/1983) study on involuntary memorization as contrasted with *mnemonic action*, Zaporozhets’ (1941a, 1941a/1986) on perception as action, as well as the wide range of studies on the perception of art.

Further studies at Kharkov not captured by Leontiev’s overview. Leontiev presents the history of the Kharkov school research in a linear fashion, starting from early Vygotsky’s psychological theory (Vygotsky, 1925/1999) and heading toward a new understanding of Vygotsky’s problem of consciousness as an object of an objective psychological research. However, an overall consideration of the studies done in Kharkov shows that Leontiev’s account of the research done by the Kharkov school is far from complete and comprehensive. In our analysis, we identified several research areas that are not covered by Leontiev in his *Materials on consciousness*:

1. The relationship between research on concept formation done in Kharkov and similar work done in parallel under the supervision of Vygotsky in the early 1930s by his collaborators such as Shif, Zeigarnik, Menchinskaya, Zankov (e.g., Shif, 1935).
2. The cycle of studies on the development of skin sensitivity to color conducted in Kharkov by Asnin and by Zaporozhets (1941a, 1941a/1986; see also A. N. Leontiev, 1940, 1940/1981), as well as experiments with animals such as Zaporozhets and Dimanshtein’s study of fish and Leontiev, Bassin & Solomakh’s study of daphnias (A. N. Leontiev, 1940, 1947, 1947/1981) not mentioned in Leontiev’s *Materials on consciousness*.
3. The *defectological* flavor of the early research at the Kharkov school, exemplified by Zaporozhets’ dissertation on deaf-mute children—suggesting possible interconnections between the work of Vygotsky and of Kharkov school researchers pioneering *typhlo-surdo-didactics* (that is, scaffolding the normal human cultural development of blind, deaf, and mute children) developed at

- Kharkov by the prominent Russian and Ukrainian scholar I. A. Sokolyanskii, first director of the Ukrainian Scientific-Research Institute (A. N. Leontiev, 1947/1980; Luria, 1940/1980; Rau, 1940/1980).¹⁸
4. Research on aesthetic perception, supervised by Zaporozhets, then head of the department of psychology of the Kharkov State Pedagogical Institute (Aranovskaya, 1940, 1945; Ginevskaya, 1941; Khomenko, 1940, 1941a, 1941c; Kontsevaya, 1941; Mistyuk, 1941; Titarenko, 1941; Zaporozhets, 1941a, 1948, 1949, 1949/1986). It is particularly interesting to note how Leontiev overlooks the striking similarity between the studies on aesthetic perception supervised by Zaporozhets and by Vygotsky's (1926/1968) early work on the psychology of art. These studies establish a direct relationship between Kharkov school studies on aesthetic development in the child and the core principles of Vygotsky's cultural-historical psychology of consciousness. Furthermore, later studies in Russia emphasized the role of Zaporozhets in the research on the aesthetic perception (Dubovis & Khomenko, 1985), personality development (Aranovskaya-Dubovis & Zaika, 1995) and the transition from sensory to emotional action (V. P. Zinchenko, 2006).
 5. The postwar period of the history of the Kharkov school is represented by studies on the development of discipline, will, motivation, and moral principles in children. These studies were conducted by the group of V. I. Asnin, who later became Head of the department of psychology at the Pedagogical Institute after Zaporozhets (Asnin, 1956; Zaporozhets & Zinchenko, 1960). This cycle of studies was probably conceived or even carried out before the war, perhaps, during Leontiev's "fourth cycle" of research, and should also be included in any complete intellectual history of the Kharkov school of psychology. Indeed, postwar studies on personality development are paralleled by very similar studies done by other members of the Vygotsky's students in Moscow; for example, by former member of the Kharkov school like Bozhovich and her associates Slavina, Morozova, and Blagonadezhina.
 6. Galperin's study on the psychology of *set* (Galperin, 1941, 1941/1980, 1945) and the possible relations between his investigations and research led by D. N. Uznadze around that time in the school of psychology at Tbilisi State University, in Georgia. To the best of our knowledge, Galperin's apparent interest in the study of *set* in his early work has remained largely unnoticed in the West.¹⁹ We speculate that the influence of the Georgian school on the Kharkov school

¹⁸ Notably, several members of the Kharkov school, such as V. I. Asnin, G. D. Lukov, and P. I. Zinchenko, prepared their dissertations at the graduate school of this institution. Incidentally, an in-depth analysis of the *defectological* line of research is very important for understanding the development of Vygotsky's psychology. Indeed, many of Vygotsky's collaborators and first-generation students subsequently developed the *defectological* tradition of Vygotskian psychological research. This is true of three out of the original Vygotsky's "three plus five" associates (i.e., A. R. Luria, N. G. Morozova, and R. E. Levina) as well as several of his later students (Zh. I. Shif, B. V. Zeigarnik, R. M. Boskis, etc.).

¹⁹ This may be explained by a misleading translation of the original term used by Galperin in his 1941 paper published in Ukrainian: the original term "*nastanova*," (in Russian, "*ustanovka*," "*Einstellung*" in German) was translated as "*orientation*" rather than "*set*." Such translation seems quite legitimate with respect to Galperin's ideas developed in the 1950s and onwards, but can hardly be justified in light of his views in the 1930s.

of psychology is the source of later research by F. V. Bassin, a member of the Kharkov school in 1930s and a prominent scholar working on the problems of consciousness, the *unconscious* and the *uncognized* (Bassin, 1969). Possible relations between the Kharkov and the Georgian schools seem to be even deeper when considering research on concept formation done in the Georgian school at that time, in parallel to Vygotskian studies on this very topic (Natadze, 1938/1980; Uznadze, 1929/1980; Vygotsky, 1986).

Galperin's theory of stepwise formation of mental actions: A case study. Perhaps the most detailed account of the scientific legacy of the Kharkov school available is G. P. Shchedrovitskii's (1980/2004) analysis of the development of Galperin's theory of the stepwise formation of mental actions. Despite this seemingly narrow focus on just one theory associated with the postwar period work of a single author, Shchedrovitskii's work is an excellent example of how to situate the intellectual history of the Kharkov school in relation to Vygotsky.

As Shchedrovitskii shows, we still do not know the real chronology of the development of Vygotsky's ideas. Shchedrovitskii discusses Vygotsky's *Thinking and speech* (1934) as presenting ideas developed well before 1934. For instance, the study of concept formation in children (presented in the fifth chapter of the book) was actually completed in 1928 by Vygotsky's collaborator Sakharov. On the other hand, a large corpus of Vygotsky's later works remained isolated from mainstream Vygotskian psychology. Indeed, tensions between the ideas of the three acknowledged leaders of psychological science at the time (Vygotsky, Leontiev, and Rubinshtein) are reflected in conflicts between the early Vygotsky and the later Leontiev, between P. Zinchenko, Rubinshtein, and Vygotsky, and between Elkonin and Rubinshtein. (This topic still remains largely unexplored.) Furthermore, while the ideas of Vygotsky, Leontiev, and Rubinshtein are typically discussed in relation to the history of psychology as it developed in the 1930s, the research and thought of Zaporozhets, Bozhovich, and Elkonin (then prominent figures of Vygotskian psychology) has never received a proper assessment in the historiography of psychology.

Shchedrovitskii writes:

"I would even dare say that the key to understanding what was actually accomplished in Vygotsky's school is insight into what happened then, later, in the middle of the 1930s. What happened later with the disciples and followers of Vygotsky was largely predetermined by what was done during these years. And if we want to understand what was going on at the end of the 1920s and in the 1930s, we must see the whole line of development; that is, see everything in its historical development, in some kind of perspective, in order to explain some of the consequences and, conversely, to be able to explain the causes through some of the consequences."²⁰

No theory of that period can be understood as a linear development. Development of psychology at that time was part of complicated historical processes. For example, one cannot understand the real meaning and the content of Galperin's theory of the stepwise formation of mental actions, or Leontiev's activity

²⁰ Among other major influences on Vygotsky and early Vygotskian psychology, Shchedrovitskii mentions the influence of *pedology* and *psychotechnics* (i.e., applied or industrial psychology), as well as that of Freud and his teaching.

theory (i.e., the history of their development, nor their internal interrelations) without analyzing the sociocultural situation in the Soviet psychology from the late 1930s to the early 1950s. Discussion of a single theory or research idea, for instance, Galperin's theory, quite naturally ends up as a discussion of broader issues such as the internal logic and course of development of Soviet psychology.

Only by considering this rich context can we understand what and why things happened as they did in a specific historical period. Context can be defined on any of the three levels proposed by Shchedrovitskii, that is, in terms of three situations that need consideration: (1) the situation of a specific study, researcher, theory and its relation to other similar studies, researchers, or theories; (2) the situation of psychology and philosophy of that time (they were not separated in the 1930s-1950s), and (3) the situation of the Soviet scientific research generally, both its domain of ideas and its socioorganizational field.

Shchedrovitskii's analysis of the origins of Galperin's theory significantly enhances our understanding the intellectual history of all of Vygotskian psychologists of the Kharkov school. However, there remain major difficulties with conducting any in depth study of them, which we address in the final section of our paper.

Challenges of Writing a History of the Kharkov School

There are a number of challenges that face any researcher in a Western context writing the intellectual history of Kharkov school, and any reader of such a history.

First of all, Vygotsky's school was deeply immersed in the context of broad international psychological research of that time. The different influences on the school include research in *Germany* (Wundt, Ach, Koffka, Kohler, Lewin, Goldstein, to mention but a few²¹), *England* (e.g., Sherrington), the *U.S.A.* (James, Watson, Titchener), *France* (Claparede, Ribot, Janet, etc.), *Switzerland* (Piaget) and certainly *Russia*. The studies referred to by Vygotsky and his students and collaborators were often read in the original, as was typical for the academic standards of that time.

Second, beginning with Vygotsky's papers on *Consciousness as a problem of the psychology of behavior* (Vygotsky, 1925/1999) and *The historical meaning of the crisis in psychology: A methodological investigation* (Vygotsky, 1927/1997), an effort was made to analyze the methodology of scientific psychological research. The Kharkov group explicitly and deliberately developed psychological theory in what would now be called a new *paradigm* (Kuhn, 1996) of psychological research. In early 1900s, psychology as a science was developing at the intersection of the concept of man presented in a great many philosophical systems, as well as a great many attempts to understand human nature within different natural sciences. In the 1920s to 1930s, Vygotsky set out on a difficult quest for the object of psychological research and continually struggled against various forms of psychological reductionism (e.g., biological, sociological) that

²¹ A large group of German scholars including Max Wertheimer, Kurt Koffka, Wolfgang Köhler, Kurt Lewin, Kurt Goldstein, and Heinz Werner immigrated to the United States in the 1930s after the Nazi's rise to power in 1933.

he felt posed major problems for psychology as an objective science. As the founder of a cultural-historical school of psychology, Vygotsky (and his followers) believed that deep understanding of human nature emerges only at the crossroads of a wide array of approaches that consider man as a social and cultural animal developed in philosophy, natural science, and the humanities. This task required an intensive metatheoretical analysis that was carried out by Vygotsky and his research team.

Third, the scientific ethos at that time in the Soviet Union was dramatically different from that of North America and Europe today. Empirical research reports and theoretical claims, references, authorship, and scientific critique were most often determined by the *Zeitgeist* of Soviet science in the 1930s that often promoted state censorship, self-censorship, and utter intolerance of any diversity of opinion. These should be taken into account in any analysis of the history of Vygotskian psychology. Following publication of the decrees of the Central Committee of the Communist Party—like that of August 25, 1931 “On the elementary and intermediate school” and that of July 4, 1936 “On pedological perversions in the system of *narkompros* [that is, Ministry of Education]”—many great scholars of that time were persecuted on the grounds of doing non-Marxist science.²² From the perspective of democratic traditions of Western science, it is perhaps difficult to understand the real dangers of forced resettlement or deportation, imprisonment or even death that psychologists in the Soviet Union of the 1930s faced constantly in their everyday and professional life. This situation helps explain why a group of promising and enthusiastic young researchers would leave the capital of their country and the hub of cultural and scientific life in the USSR—their teacher and spiritual leader, Vygotsky, stayed in Moscow after all—to establish a new research community in the relatively provincial setting of Kharkov.

Finally, understanding the publications and publishing policy of the Kharkov group of researchers is no simple matter. Opportunities to publish studies were rather limited. For example, the first major collection of the studies done by the Kharkov group was originally scheduled for publication in 1935, but was then suddenly prohibited from publication by an administrative decision (Zaporozhets & Leontiev, 1983). Another plausible reason why publications done by group members in the 1930s are so rare is that many of its now prominent scholars were virtually “invisible” in a climate of increasing political repression and persecution. They preferred to stay in the shadows in their struggle for scientific, psychological and even physical survival. Kozulin correctly remarks that “at that time the [Kharkov] school was almost invisible” (Kozulin, 1990).

²² Valsiner and van der Veer correctly point out that the reasons for the persecutions of scientists had nothing to do with Marxism and seem to have been utterly irrational: “In essence, the authorities were following the very efficient divide-and-rule principle, i.e., they attentively followed the vehement discussions between different research groups within psychology (almost all of whom claimed to be in line with the communist party principles) and then suddenly and capriciously decided in favor of one or the other group. As it was in constant flux, no one could be sure what the party line was, and this unpredictability caused a feeling of uneasiness and fundamental insecurity that demoralized the discipline and led people to cast stones at colleagues in desperate attempts to save their own career (or even their skin in the period that followed)” (Valsiner & van der Veer, 2000, p. 337).

True, some works of the school were later translated and republished in the collections of selected works of the most prominent members of the group like A. N. Leontiev (A. N. Leontiev, 1935a/1983, 1940/1994, 2003), Zaporozhets (1986) and Elkonin (1989). Another notable source is the *Khrestomatiia po vozrastnoi i pedagogicheskoi psikhologii (The reader in age and pedagogical psychology)* published by Ilyasov and Liaudis in Moscow, that contained fragments of the early works of the Kharkov school (Asnin, 1941a/1980; Bozhovich, 1945/1980; Elkonin, 1940/1980; Galperin, 1936/1980; Khomenko, 1941c/1980; Zaporozhets, 1939/1986, 1941a/1980; P. I. Zinchenko, 1939/1980). Several works of that period exist in their English translation in the journal *Soviet psychology*, and are still waiting for their discovery and republication in Slavic languages.

The availability of the texts produced by Kharkov group members is improving these days. For instance, the 1929 to 1931 study done by Bozhovich and supervised by Vygotsky, long referred to as a manuscript, was recently published (Bozhovich, 1935b/2006). Another important recent publication is a volume of early texts by A. N. Leontiev (A. N. Leontiev, 2003) and by Luria (Luria, 2003). Several new English translations of works by A. N. Leontiev, Zaporozhets, Elkonin, Bozhovich, have also appeared over the last decade in the *Journal of the Russian and East European Psychology*. Even so, the vast majority of the studies done by the members of the Kharkov group in the 1930s still remain either unpublished or are available in extremely rare publications, mostly written in Ukrainian. We generally have only fragmentary accounts of this work, written up in secondary sources, with much of the research done by Vygotsky's students in the 1930s to 1950s still inaccessible to a wide audience.

Conclusion

Our direct knowledge of the Kharkov School, and of this period of the history of Vygotskian psychology, remains very limited and fragmentary. Unfortunately, the best accounts we have of the Kharkov School of this period are summary statements like that of Leontiev. In the present paper, our reconstruction of the intellectual history of the Kharkov school of Vygotsky's students is done on the basis of de tailed comparative analysis of published materials. A more thorough reconstruction of the work of the Kharkov school must eventually be based on an analysis of the original publications and archival materials. We make a first step in this direction in a study of the history of the Kharkov school based on original Russian and Ukrainian publications of the 1930s and of archival materials that we discovered in Ukraine (Yasnitsky & Ferrari, 2008). One thing is clear, however, the diversity of these studies can hardly be understood except within the context of Vygotskian research aimed at the objective investigation of human consciousness.

References

- Aranovskaya, D. M. (1940). Zavisimost' ponimaniya rebenkom skazki ot ee kompozitsii. In *Naukova sesiya KhDPI*. Kharkov.
- Aranovskaya, D. M. (1945). *Zavisimost' ponimaniya rebenkom skazki ot ee kompozitsii*. Unpublished Candidate dissertation, Kharkov.
- Aranovskaya-Dubovis, D. M., & Zaika, E. V. (1995). Idei A. V. Zaporozhtsa o razvitii lichnosti doshkol'nika. *Voprosy psikhologii*, 5, 87–99.

- Asnin, V. I. (1941a/1981). The conditions for reliability of a psychological experiment. *Soviet psychology*, 19, 80–99.
- Asnin, V. I. (1941a). Ob usloviyakh nadyozhnosti psikhologicheskogo eksperimenta. In *Naukovi zapysky KhDPI* (Vol. VI). Kharkov.
- Asnin, V. I. (1941a/1980). Ob usloviyakh nadyozhnosti psikhologicheskogo eksperimenta. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Asnin, V. I. (1941b/1980). The development of visual-operational thinking in children. *Soviet psychology*, 18, 23–36.
- Asnin, V. I. (1941b). Pro pozvyttok naочно-diyovogo myslennyya u dytyny. In *Pratsi respublikans'koi naukovoji konferentsiji z pedagogiky i psikhologii* (Vol. II. Psikhologiya).
- Asnin, V. I. (1956). O nauchnoj rabote kollektiva psixologov Xar'kovskogo gosudarstvennogo pedagogicheskogo instituta. *Voprosy psixologii*, 3, 113–114.
- Bassin, F. V. (1969). Consciousness and the unconscious. In M. Cole & I. Maltzman (Eds.), *A handbook of contemporary Soviet psychology* (pp. 399–420). New York: Plenum Press.
- Bozhovich, L. I. (1935b). Rech' i prakticheskaya intellektual'naya deyatel'nost'. *Unpublished manuscript*.
- Bozhovich, L. I. (1935b/2006). Rech' i prakticheskaya intellektual'naya deyatel'nost' rebyonka (eksperimental'no-psikhologicheskoe issledovanie). *Kul'turno-istoricheskaya psikhologiya*, 1.
- Bozhovich, L. I. (1945/1980). Psikhologicheskij analiz formalizma v usvoenii shkol'nykh znaniy. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Bozhovich, L. I. (1972/1997). Problema razvitiya motivacionnoj sfery revjonka. In L. I. Bozhovich (Ed.), *Problemy formirovaniya lichnosti*. Moscow: Institut prakticheskoi psikhologii.
- Bozhovich, L. I., & Zinchenko, P. I. (1941/1980). The psychology of acquiring factual knowledge by schoolchildren. *Soviet Psychology*, 18, 67–83.
- Bozhovich, L. I., & Zinchenko, P. I. (1941). Pro psikhologiyu zasvoennyya znan' uchnyyamy. In *Pratsi respublikans'koi naukovoji konferentsii z pedagogiky i psikhologii* (Vol. II). Psikhologiya).
- Chudnovskii, V. E. (1998). Predislovie. In L. S. Slavina (Ed.), *Trudnye deti*. Moscow: Institut prakticheskoi psikhologii.
- Cole, M. (1977). Introduction to “The development of logical thinking in the preschool-age child” by A. V. Zaporozhets. *Soviet psychology*, 15, 45–46.
- Cole, M. (1980). Introduction: The Kharkov school of developmental psychology. *Soviet psychology*, 18, 3–8.
- Davydov, V. V., & Radzikhovskii, L. A. (1980/1985). Vygotsky's theory and activity-oriented approach in psychology. In J. V. Wertsch (Ed.), *Culture, communication, and cognition: Vygotskian perspectives* (pp. 35–65). Cambridge: University Press.
- Dubovis, D. M., & Khomenko, K. E. (1985). Vorposy psixologii xudozhestvennogo vospriyatiya v trudax A. V. Zaporozhtsa (K 80-letiyu so dnya rozhdeniya). *Voprosy psixologii*, 5, 117–123.
- Elkonin, D. B. (1940/1980). Razvitie ustnoj i pis'mennoj rechi uchaschikhsya. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Elkonin, D. B. (1969/1995). Problems in the psychology of activity. *Journal of Russian and East European Psychology*, 33, 32–34.

- Elkonin, D. B. (1978/2005). The psychology of play. Preface: The biography of this research. *Journal of Russian and East European Psychology*, 43, 11–21.
- Elkonin, D. B. (1978). *Psikhologiya igry*. Moscow: Pedagogika.
- Galperin, P. I. (1936). *Psikhologicheskoe razvitie orudij cheloveka i vspomogatel'nykh sredstv u zhivotnykh i ego znachenie*. Unpublished Candidate dissertation, Kharkov.
- Galperin, P. I. (1936/1980). Funktsional'nye razlichiya mezhdru orudiem i sredstvom. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg., pp. 195–203). Moscow: MGU.
- Galperin, P. I. (1941/1980). The role of orientation in thought. *Soviet Psychology*, 18, 84–99.
- Galperin, P. I. (1941). Do pytannya pro rol' nastanovy u myslenni. In *Pratsi respublikans'koi naukovoji konferentsii z pedagogiky i psikhologii* (Vol. II. Psikhologiya).
- Galperin, P. I. (1945). Smyslovye skhemy povedeniya, lezhaschie v osnove nervnoj deyatel'nosti. In *Psikhologiya: Sbornik, posvyaschennyj 60-letiyu so dnya rozhdeniya i 35-letiyu nauchnoj deyatel'nosti D. N. Uznadze*. Tbilisi.
- Galperin, P. I. (1969/1995). Problems in the psychology of activity. *Journal of Russian and East European Psychology*, 33, 18–31.
- Ginevskaya, T. O. (1941). Znachenie klompozitsii v vospriyatii det'mi risunka illyustratsii. In *Naukovi zapysky Kharkivs'kogo derzhavnogo pedagogichnogo instytutu* (Vol. VI). Kharkov.
- Haenen, J. (1996). *Piotr Gal'perin: Psychologist in Vygotsky's footsteps*. New York: Nova Science.
- Ivanova, E. F. (2002). Khar'kovskaya psikhologicheskaya shkola 1930-x godov: Istoriya sozdaniya i metodologicheskie printsipy. *Visnyk Kharkivs'koho universytetu*, 550, 97–99.
- Khomenko, K. E. (1940). Rozvytok estetychnogo spryjmannya u dytyny. In *Naukova sesiya KhDPI*. Kharkov.
- Khomenko, K. E. (1941a/1980). The emergence of visual-imagic thought in the child. *Soviet Psychology*, 18, 37–46.
- Khomenko, K. E. (1941a). Vospriyatie izobrazheniya prostranstvennykh i perspektivnykh otoshenij u detej mladshego vozrasta. In *Naukovi zapysky Kharkivs'kogo derzhavnogo pedagogichnogo instytutu* (Vol. VI). Kharkov.
- Khomenko, K. E. (1941b). Vynykhennya naochno-obraznogo myslennya u dytyny. In *Pratsi respublikans'koi naukovoji konferentsii z pedagogiky i psikhologii* (Vol. II. Psikhologiya).
- Khomenko, K. E. (1941c). Ponimanie khudozhestvennogo obraza det'mi mladshego vozrasta. In *Naukovi zapysky Kharkivs'kogo derzhavnogo pedagogichnogo instytutu* (Vol. VI). Kharkov.
- Khomenko, K. E. (1941c/1980). Ponimanie khudozhestvennogo obraza det'mi mladshego vozrasta. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Kontsevaya, O. M. (1941). Rozuminnyya dytynoyu bajky. In *Pratsi respublikans'koi naukovoji konferentsii z pedagogiky i psikhologii* (Vol. II. Psikhologiya), pp. 135–145).
- Kozulin, A. (1984). *Psychology in Utopia: Toward a Social History of Soviet Psychology*. Cambridge, MA: MIT Press.
- Kozulin, A. (1990). *Vygotsky's psychology: A biography of ideas*. New York: Harvester Wheatsheaf.

- Kuhn, T. S. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago: University of Chicago Press.
- Laktionov, A. N., & Sereda, G. K. (1993). Deyatel'nostnaya paradigma i voprosy pamyati v trudakh P. I. Zinchenko [Activity paradigm and memory research in the work of P. I. Zinchenko]. *Voprosy psikhologii*, 4.
- Leontiev, A. A. (1983). Tvorcheskii put' Alekseya Nikolaevicha Leont'eva. In A. V. Zaporozhets, V. P. Zinchenko, O. V. Ovchinnikova & O. K. Tikhomirov (Eds.), *A. N. Leont'ev i sovremennaya psikhologiya*. Moscow: MGU.
- Leontiev, A. A. (2005). The life and creative path of A. N. Leontiev. *Journal of Russian and East European Psychology*, 43, 8–69.
- Leontiev, A. A., Leontiev, D. A., & Sokolova, E. E. (2005). *Aleksei Nikolaevich Leontiev: Deyatel'nost', soznanie, lichnost'*. [Aleksei Nikolaevich Leontiev. Activity, consciousness, personality]. Moscow: Smysl.
- Leontiev, A. N. (1933/1994). Beseda s Vygotskim. In A. A. Leont'ev & D. A. Leont'ev (Eds.), [Philosophy of psychology] (pp. 22–25). Moscow: Mosk. University.
- Leontiev, A. N. (1935a/1995). The assimilation of scientific concepts by schoolchildren. *Journal of Russian and East European Psychology*, 33, 12–38.
- Leontiev, A. N. (1935a). Ovladenie uchaschimisya nauchnymi ponyatiyami kak problema pedagogicheskoy psikhologii. *Unpublished collection of the Kharkov school works*.
- Leontiev, A. N. (1935a/1983). Ovladenie uchschimisya nauchnymi ponyatiyami kak problema psikhologii. In A. N. Leontiev (Ed.), *Izbrannye psikhologicheskie proizvedeniya*. Moscow: Pedagogika.
- Leontiev, A. N. (1938). *Psikhicheskoe razvitie rebenka i obuchenie*. Paper presented at the Tezisy dokladov nauchnoj sessii Khar'kovskogo gosudarstvennogo pedagogicheskogo instituta, Kharkov.
- Leontiev, A. N. (1940–41/1994). Materials on consciousness. In A. A. Leont'ev & D. A. Leont'ev (Eds.), [Philosophy of psychology] (pp. 26–48). Moscow: Mosk. University.
- Leontiev, A. N. (1940). *Razvitie psikhiki*. Unpublished Doctor dissertation, Moscow.
- Leontiev, A. N. (1940/1981). Problema vzniknoveniya oschuscheniya. In A. N. Leontiev (Ed.), *Problemy razvitiya psikhiki* (pp. 15–160). Moscow: MGU.
- Leontiev, A. N. (1947). *Ocherk razvitiya psikhiki*. Moscow.
- Leontiev, A. N. (1947/1980). Ob opyte obucheniya slepoglukhonemykh. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Leontiev, A. N. (1947/1981). Ocherk razvitiya psikhiki. In A. N. Leontiev (Ed.), *Problemy razvitiya psikhiki*. Moscow: MGU.
- Leontiev, A. N. (1967). The struggle for the problem of consciousness in the making of Soviet psychology. *Voprosy psixologii*, 2, 14–23.
- Leontiev, A. N. (1967/1983). The struggle for the problem of consciousness in the making of Soviet psychology. In A. N. Leontiev (Ed.), *Izbrannye psikhologicheskie proizvedeniya* (Vol. 1, pp. 14–23). Moscow: Pedagogika.
- Leontiev, A. N. (1969/1995). Problems in the psychology of activity. *Journal of Russian and East European Psychology*, 3, 39–53.
- Leontiev, A. N. (1986). The problem of activity in the history of Soviet psychology [Problema deyatel'nosti v istorii sovetskoj psikhologii]. *Voprosy psixologii*, 4.
- Leontiev, A. N. (1999). Avtobiografiya. In A. E. Voiskunskii, A. N. Zhdan & O. K. Tikhomirov (Eds.), *Traditsii i perspektivy deyatel'nostnogo podxoda v psixologii: Shkola A. N. Leontieva*. Moscow: Smysl.
- Leontiev, A. N. (2003). *Stanovlenie psikhologii deyatel'nosti: Rannie raboty*. Moscow: Smysl.
- Leontiev, A. N., & Rozenblyum, A. N. (sic!) (1935). *Psikhologicheskoe issledovanie*

- deaytel'nosti i intersov posetitelei Tsentral'nogo Parka kul'tury i otdyxa imeni Gor'kogo*. Unpublished manuscript, Moscow.
- Lukov, G. D. (1937). *Ob osoznanii rebenkom rechi v protsesse igry*. Unpublished Candidate dissertation, Leningrad (Kharkov?).
- Lukov, G. D. (1939). Osoznanie det'mi rechi v protsesse igry. In *Naukovi zapysky Kharkivs'kogo derzhavnogo pedagogichnogo instytutu* (Vol. 1, pp. 65–103). Kharkov.
- Luria, A. R. (1940/1980). Nauchnoe znachenie opyta I. A. Sokolyanskogo. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Luria, A. R. (2003). *Psikhologicheskoe nasledie: Izbrannye trudy po obschej psikhologii*. Moscow: Smysl.
- Mescheryakov, B. G. (2003). P. I. Zinchenko i psikhologiya pamyati [P. I. Zinchenko and the psychology of memory] *Voprosy psikhologii*, 2.
- Mescheryakov, B. G. (in print). P. I. Zinchenko's mnemonic effects. *Journal of Russian and East European Psychology*.
- Mistyuk, V. V. (1941). Vospriyatie rebenkom izobrazhenij dvizheniya. In *Naukovi zapysky Kharkivs'kogo derzhavnogo pedagogichnogo instytutu* (Vol. VI, pp. 169–180). Kharkov.
- Natadze, R. G. (1938/1980). Metody eksperimental'nogo formirovaniya real'nyx ponyatij. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg., pp. 210–219). Moscow: MGU.
- Rau, F. A. (1940/1980). O vospitanii o obuchenii slepoglukhonemykh. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Repkin, V. V. (1998). Iz istorii issledovaniya problem razvivayushego obucheniya v Khar'kove. *Vestnik*, 4.
- Sereda, G. K. (1984/1994). The significance of P. I. Zinchenko's scientific contribution to the development of the psychology of memory (on his 80th birthday). *Journal of Russian and East European Psychology*, 32, 23–32.
- Sereda, G. K. (1984). O znachenii nauchnogo vklada P. I. Zinchenko v razvitie psikhologii pamiati. *Voprosy psikhologii*, 6, 137–140.
- Sereda, G. K. (1994). The Kharkov school of psychology. *Journal of Russian and East European Psychology*, 32, 7–8.
- Shchedrovitskii, G. P. (1980/2004). *Psikhologiya i metodologiya*. Moscow: Put'.
- Shif, Z. I. (1935). *Razvitie zhitejskix i nauchnyx ponyatij*. Moscow.
- Sokolova, E. E. (2001). "Neklassicheskaya" psikhologiya A. N. Leont'eva i ego shkoly. *Psikhologicheskii zhurnal*, 6, 14–24.
- Titarenko, T. I. (1941). Rozuminnya dytynoyu kazky. In *Pratsi respublikans'koi naukovoi konferentsii z pedagogiky i psykhologiji* (Vol. II. Psykhologiya).
- Uznadze, D. N. (1929/1980). Vyrabotka ponyatij v doshkol'nom vozraste. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg., pp. 121–130). Moscow: MGU.
- Valsiner, J. (1988). *Developmental psychology in the Soviet Union*. Brighton, Sussex: Harvester Press.
- Valsiner, J., & van der Veer, R. (2000). *The social mind: Construction of the idea*. New York: Cambridge University Press.
- Van der Veer, R., & Valsiner, J. (1991). *Understanding Vygotsky: A quest for synthesis*. Cambridge, MA: Blackwell Publishers.

- Venger, L. A. (1985). A. V. Zaporozhets i ego vklad v sovetkuyu psikhologiyu. *Voprosy psixologii*, 4, 121–125.
- Voiskunskii, A. E., Zhdan, A. N., & Tikhomirov, O. K. (Eds.). (1999). *Traditsii i perspektivy deyatel'nostnogo podkhoda v psixologii: Shkola A. N. Leontieva*. Moscow: Smysl.
- Vygotsky, L. S. (1925/1999). Consciousness as a problem in the psychology of behavior. In N. N. Veresov (Ed.), *Undiscovered Vygotsky: Etudes on the pre-history of cultural-historical psychology* (pp. 251–281). Frankfurt am Main: Peter Lang Publishers.
- Vygotsky, L. S. (1926/1968). *Psikhologiya iskusstva*. Moscow: Iskusstvo.
- Vygotsky, L. S. (1927/1997). The historical meaning of the crisis in psychology: A methodological investigation. 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. 233–344). New York: Plenum Press.
- Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: MIT Press.
- Yasnitsky, A., & Ferrari, M. (2008). From Vygotsky to Vygotskian psychology: Introduction to the history of the Kharkov school. *Journal of the History of the Behavioral Sciences*, 44.
- Zaporozhets, A. V. (1936). *Rol' elementov praktiki i rechi v razvitii myshleniya u detej*. Unpublished Candidate dissertation, Kharkov.
- Zaporozhets, A. V. (1939). Rol' elementiv praktyky i movy v rozvytku myslennya u dytyny. In *Naukovi zapysky KhDPI* (Vol. 1). Kharkov.
- Zaporozhets, A. V. (1939/1986). Rol' elementov praktiki i rechi v razvitii myshleniya u detej. In A. V. Zaporozhets (Ed.), *Izbrannye psikhologicheskie trudy* (pp. 155–176). Moscow.
- Zaporozhets, A. V. (1941a). Osobennosti i razvitie protsessa vospriyatiya. In *Naukovi zapysky KhDPI* (Vol. VI). Kharkov.
- Zaporozhets, A. V. (1941a/1980). Osobennosti i razvitie protsessa vospriyatiya. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetских avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Zaporozhets, A. V. (1941a/1986). Osobennosti i razvitie protsessa vospriyatiya. In A. V. Zaporozhets (Ed.), *Izbrannye psikhologicheskie trudy* (pp. 55–65). Moscow.
- Zaporozhets, A. V. (1941b/1980). Thought and activity in children. *Soviet Psychology*, 18, 9–22.
- Zaporozhets, A. V. (1948). Psikhologiya vospriyatiya skazki rebenkom-doshkol'nikom. *Doshkol'noe vospitanie*, 9.
- Zaporozhets, A. V. (1949). Psikhologiya vospriyatiya rebyonkom-doshkol'nikom literaturnogo proizvedeniya. In *Trudy Vserossijskoj nauchnoj konferentsii po doshkol'nomu vospitaniiu*. Moscow.
- Zaporozhets, A. V. (1949/1986). Psikhologiya vospriyatiya rebyonkom-doshkol'nikom literaturnogo proizvedeniya. In A. V. Zaporozhets (Ed.), *Izbrannye psikhologicheskie trudy* (pp. 66–77). Moscow.
- Zaporozhets, A. V. (1969/1995). Problems in the psychology of activity. *Journal of Russian and East European Psychology*, 33, 12–17.
- Zaporozhets, A. V., & Leontiev, A. A. (1983). Comments. In A. N. Leontiev (Ed.), *Izbrannye psikhologicheskie proizvedeniya* (pp. 386–390). Moscow: Pedagogika.
- Zaporozhets, A. V., & Lukov, G. D. (1941). Pro rozvytok mirkuvannya u dytyny molodshogo viku. In *Naukovi zapysky KhDPI* (Vol. VI). Kharkov.
- Zaporozhets, A. V., & Lukov, U. D. (1941/1980). The development of reasoning in young children. *Soviet psychology*, 18, 47–66.

- Zaporozhets, A. V., & Lukov, U. D. (1941/2002). The development of reasoning in young children. *Journal of Russian and East European Psychology*, 40, 30–46.
- Zaporozhets, A. V., & Zinchenko, V. P. (1960). "Uchenye zapiski Instituta psikhologii USSR" (toma I-IX. Kiev. 1949–1959 gg.). *Voprosy psikhologii*, 1, 165–172.
- Zaporozhets, A. V., Zinchenko, V. P., & El'konin, D. B. (1964/1971). Development of thinking. In A. V. Zaporozhets & D. B. El'konin (Eds.), *The psychology of preschool children* (pp. 186–254). Cambridge, MA: MIT.
- Zaporozhets, A. V., Zinchenko, V. P., & El'konin, D. B. (1964). Razvitie myshleniya. In A. V. Zaporozhets & D. B. El'konin (Eds.), *Psixologiya detej doshkol'nogo vozrasta* (pp. 183–246). Moscow: Prosveschenie.
- Zinchenko, P. I. (1937). *O zabyvanii i vosproizvedenii shkol'nykh znaniy* [On forgetting and remembering academic knowledge]. Unpublished Kandidat (doctoral) thesis, Kharkov.
- Zinchenko, P. I. (1939/1980). O zabyvanii i vosproizvedenii shkol'nykh znaniy. In I. I. Ilyasov & V. Ya. Lyaudis (Eds.), *Khrestomatiya po vozrastnoi i pedagogicheskoi psikhologii* (Vol. 1. Raboty sovetskikh avtorov perioda 1918–1945 gg.). Moscow: MGU.
- Zinchenko, P. I. (1939a/1983). The problem of involuntary memory. *Soviet Psychology*, 22, 55–111.
- Zinchenko, P. I. (1939a). Problema neproizvol'nogo zapominaniya. In *Naukovi zapysky Kharkivs'kogo derzhavnogo instytutu inozhnykh mov* (Vol. 1, pp. 145–187).
- Zinchenko, P. I. (1939b). O zabyvanii i vosproizvedenii shkol'nykh znaniy. In *Naukovi zapysky Kharkivs'kogo derzhavnogo instytutu inozhnykh mov* (Vol. 1, pp. 189–213).
- Zinchenko, V. P. (1969/1995). The unsatisfactory state of the problem of activity in engineering psychology. *Journal of Russian and East European Psychology*, 33, 9–10.
- Zinchenko, V. P. (1993). Slovo ob Uchitele. *Voprosy psixologii*, 1.
- Zinchenko, V. P. (1995). Stanovlenie psixologa (K 90-letiyu so dnya rozhdeniya A. V. Zaporozhtsa). *Voprosy psixologii*, 5.
- Zinchenko, V. P. (2001). From classical to organic psychology. The systemic role of an elite subculture. *Journal of Russian and East European Psychology*, 39, 32–77.
- Zinchenko, V. P. (2003a). "Da, ochen' protivorechivaya figura." *Zhurnal prakticheskogo psikhologa*, 1–2, 162–179.
- Zinchenko, V. P. (2003b). Kharkov school. In B. G. Mescheryakov & V. P. Zinchenko (Eds.), *Bol'shoi psikhologicheskii slovar'*. Moscow: Praim-Evroznak.
- Zinchenko, V. P. (2006). Aleksandr Vladimirovich Zaporozhets: Zhizn' i tvorchestvo (ot sensorного dejstviya k emotsional'nomu). *Kul'turno-istoricheskaya psikhologiya*, 1.
- Zinchenko, V. P., & Morgunov, E. B. (1994). *Chelovek razvivayushchisya: Ocherki Rossijskoj psikhologii*. Moscow: Trivola.
- Zinchenko, V. P., & Veresov, N. (2002). Eds.' introduction. *Journal of Russian and East European Psychology*, 40, 3–12.

Received November 15, 2006

Revision received November 15, 2006

Accepted February 28, 2008 ■